CHAPTER ONE
INTRODUCTION

1.1. Background to the Study

Crude oil production in Nigeria began at Oloibiri in the present day Bayelsa State about sixty years ago and it has brought much wealth, foreign exchange earnings, foreign direct investments and fame to Nigeria. Olorunsogo (2011) opines that Nigeria has earned over $600 billion from oil since 1956 when oil was discovered in commercial quantity in Nigeria. Ikelegbe (2010) notes that apart from building a new capital city, oil has brought much development to other parts of Nigeria and particularly to state officials, the ruling class, political elite, the dominating groups that have controlled the Nigerian state, and the transnational oil companies. The author, however, regrets that back in the Niger Delta, it is believed that oil has brought poverty, misery, tears, diseases, bloodshed, violence, conflicts and a low intensity war.

Grievance management is a form of Alternative Dispute Resolution (ADR) mechanism which focuses on dialogue between parties and the search for sustainable solution that meets the core interest of both parties, thereby saving time and money and possibly preventing future conflicts. The number of expressed or registered grievances is one of the most telling indicators of company-community relations. Considering the legal costs and reduced productivity implications of grievances, effective management and strategic decisions must be undertaken to reduce the frequency of grievance, since it is unavoidable in organizational relationships.

According to the Organization of Petroleum Exporting Countries (OPEC) Nigeria has a proven crude oil reserve capacity of thirty seven billion barrels of crude oil (OPEC, 2014)). This figure is slightly below Libya which has forty billion barrels – the largest on the continent of Africa. Nigeria has the largest natural gas reserve in Africa which is estimated at 5.1 trillion cubic liters. Furthermore, OPEC (2014) notes that Nigeria is the largest exporter of crude oil in Africa with a 2014 average of 2.28 million barrels of oil per day. As at July 2015, Nigeria’s crude oil production data stood at 2.27m barrels per day. Furthermore, Nigeria is among the world's top five exporters of LNG (Liquefied Natural Gas). According to the United States Energy Information Administration -EIA- (2015), Nigeria's oil production is hampered by instability and supply disruptions, while

the natural gas sector is restricted by the lack of infrastructure to monetize natural gas that is currently flared (burned off). The EIA (2015) also notes that corruption in the Nigerian public sector and the inability of the Federal Government to pass and implement the proposed Petroleum Industry Bill (PIB) also hampered the petroleum industry.

Nigeria became a member of the Organization of the Petroleum Exporting Countries (OPEC) in 1971, more than a decade after oil production began in Oloibiri community (Bayelsa State) in the 1950s. Oil Production figures by OPEC for April 2016 show that Nigeria was dethroned as the leading oil producer in Africa by Angola in March 2016, Oil productions in Nigeria suffered from supply disruptions due to rising militancy attacks in the Niger Delta, thereby resulting in unplanned outages. Nigeria's oil and natural gas resources are the mainstay of the country's economy. The majority of reserves are found along the country's Niger River Delta and offshore in the Bight of Benin, the Gulf of Guinea, and the Bight of Bonny. The country's oil and natural gas industry account for about 80 percent of total government revenue accruable to the federation account, 95 percent of foreign exchange earnings, about 15 percent to the country's GDP (14.85 percent in the first quarter of 2014), and 4 percent of total employment – thus making Nigeria one of the most oil-dependent economies in the world (Sampson, 2013). An OPEC (2015) note that Nigeria's economy is vulnerable to a drop in crude oil prices as it is very dependent on oil revenue.

However, with the recent oil facility bomb explosions in oil export pipelines by the militant group called the Niger Delta Avengers (NDA) since February 2016, and the government call for diversification of the Nigerian economy to agriculture and commerce, these figures could change. OPEC (2015) records that Nigeria's Gross Domestic Product (GDP) as at March 2016, stood at $492.986 million. This figure is a little above the 2015 OPEC figure of $484,635 million. OPEC (2015) estimates Nigeria to have over 183.173 million inhabitants with an annual population growth rate of 2.6 per cent. According to the National Bureau of Statistics (2015), Nigeria's inflation rate stood at 9.2 percent by October 2015. The Inflation rate moved up to 9.6 percent in December 2015 and further up to 11.4 percent in March 2016. The monthly inflation rate as at June 2016 is estimated to be16.3 percent. (NBS, 2015)

According to UNDP (2006) Niger Delta should ordinarily be a gigantic economic reservoir of national and international importance. Its rich endowment of oil and gas

resources feed methodically into the international economic system in exchange for the massive revenues that carry the promise of socio-economic transformation within the Delta itself. In reality, the Niger Delta is a region suffering from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth, squalor and endemic conflict (UNDP, 2006). EIA (2015) observed that Nigeria is believed to have lost $10.9 billion in revenue arising from oil theft in 2009- 2011, respectively, due to incessant attacks of the militancy in the region. EIA (2015) further notes that the oil sector in Nigeria has witnessed disruptions in recent times due to pipeline vandalization, incidents of illegal bunkering and theft of crude oil which have resulted in incessant declarations of force majeure by some International Oil Companies (IOCs) such as NAOC (Agip), Total, and Shell Petroleum Development Company (Shell). NNPC (2014) estimation showed that about $1.23billion revenue was lost to oil theft and vandalization in the first quarter of 2013 alone. NNPC (2014) further notes that oil theft has often led to severe pipeline damage, causing loss of production, pollution, and forcing companies to shut down production in the Niger Delta..

Oil and natural gas industries are primarily located in the Niger Delta region where there has been notable grievance. The Niger Delta area constitutes the nine Oil producing states namely Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers States. The 2006 Population Census estimated that the Niger delta has 23 percent of the Nigerian population totaling 31 million inhabitants. (Population Census, 2006). With the current OPEC (2015) estimates of 183.173 million inhabitants in Nigeria, it is postulated that about 42million people (23 percent of 183.173 million) inhabit the Niger Delta.

Brume (2006) warns that when discontent is left unseated or unmitigated, the form of its expression grows horizontally and vertically; horizontally in that it gains greater followership both in the Niger Delta region and beyond and vertically, in that this expression of discontent escalates from mere quest for development and employment or equitable treatment with others, to the current language of resource control. Boele, Fabig and Wheeler (2001) strongly argue that the unseated grievances of the Niger Delta in Nigeria led to the formation in 1990 of the movement for the survival of Ogoni people (Mosop) who constructed the Ogoni Bills of Right. The above could also be responsible

for the emergence of the Ijaw youth congress (IYC) which came out with the Kaiama Declaration of December 11,1998. Highlights of The Kaiama Declaration of the All Ijaw Youths Conference of 11th December 1998 which has a Ten point Resolution and signed by Felix Tuodolo include: That all land and natural resources (including mineral resources) within the Ijaw territory belong to Ijaw communities and are the basis of Ijaw survival. That the Ijaw ethnic Nationality ceases to recognize all "undemocratic" decrees that rob the peoples/communities of the right to ownership and control of lives and resources, which were enacted without their participation and consent. Some of these decrees include the Land Use Decree and The Petroleum Decree.

Since after the Kaiama Declaration of 1998, over 20 militant youth organization such as the Niger Delta people volunteer force (NDPVF), Movement for emancipation of the Niger Delta (MEND), Niger Delta Vigilante, and the Niger Delta Peoples Salvation Front have emerged. Ibeanu (2000) contends that years of military repression has left the Niger Delta people brutalized but militarized. Etekpe & Okoli (2010) posits that the goal of these organizations is to increase the spate of oil pipeline vandalisation and other forms of disrupting the activities of the Multi-National Oil Companies (MNOC'S) in the region so as to compel the government and MNOC's in the region to negotiate with them for the purpose of developing the Niger Delta region. Other groups such the Movement for the Actualization of the Sovereign State of Biafra (MASSOB)) and the Indigenous People of Biafra (IPOB) are also perceived to be outcomes of unseated grievances due to neglect and deprivation.

The International Crisis Group (2015) noted that at its peak in 2009, the insurgency in the Niger Delta was claiming an estimated 1,000 lives a year, had cut Nigeria's oil output by over 50 per cent and was costing the government close to four billion naira (nearly $19 million) per day in counterinsurgency operations. The Group warned in September 2015 that a resurgence of violence and increased oil-related crime in the Delta could seriously undermine national security and economic stability, which is already weighed down by the Boko Haram insurgency and dwindling oil revenues.

The emergence of the Niger Delta Avengers in 2016 and the stream of oil facility explosions to their credit since February 2016 further indicate that the grievance is still unseated. Among the demands by the Niger Delta Avengers as presented by group spokesperson, Mudoch Agbinibo, is the unconditional release of the leader of the

Indigenous Peoples of Biafra (IPOB) - Mr Nnamdi Kanu, and the immediate implementation of the report of the 2014 National Conference. Other demands include the reflection of a new oil block ownership regime, whereby 60% of the blocks go to oil producing regions while 40% go to the non-oil producing regions, the Clean-up of Ogoni-land and all oil polluted lands in the Niger Delta, payment of compensation to all oil producing communities, and the continual funding of the Niger Delta Amnesty Programme.

The Petroleum Act of 1969 and the Land Use Decree of 1978 in the minds of the people of Niger Delta seem to serve as instruments of dispossession against the oil producing communities, thus depriving them of their right to property and wealth. Brume (2006) opines that oil pipeline vandalisation is a widespread expression of discontent and frustration due to deprivation. The Nigerian Petroleum Act, the Nigerian Constitution, as well as the oil and gas legal frameworks are not seen to give adequate security to the oil producing communities in terms of protecting them from the effects of oil exploration. The oil host communities are thus believed to be deprived, neglected, marginalized and repressed in the midst of poverty, environmental degradation and underdevelopment. The oil revenue in the minds of the oil host communities is seen to be carted away to develop other well to do individuals, communities, and regions thus leaving the host communities with the attendant negative effects. This could be perceived as the major source of grievance between oil host communities and oil producing companies in Nigeria.

The draft of the Petroleum Industry Bill (PIB) which is an effort to conform the oil sector to international norms and improve relations with oil producing communities was submitted to the National Assembly by the Ministry of Petroleum Resources in July 2012. The delay in passing the PIB has resulted in fewer investments in new projects, and there has not been a licensing round since 2007, perhaps due to regulatory uncertainties. These regulatory uncertainties have also slowed the development of natural gas projects as the PIB is expected to introduce new fiscal terms to govern the natural gas sector. (United States Energy Information Agency (EIA) 2015). The bill has raised local expectations in the Niger delta, but passage is held hostage by several interests. The International Crisis Group (2015) notes that lawmakers from the Northern Geo-political zones of Nigeria and other elites argue that the need the fund is meant to address has long been dealt with by earlier concessions to the Delta, including the 13 per cent derivation

formula, the Niger Delta Development Company (NDDC), the Ministry of Niger Delta (MNDA) and the Amnesty Program. The International Crisis Group (2015) further observes that several Pro-Hausa/Fulani policy analysts have argued that if passed in the form proposed by the immediate past administration in Nigeria, the Delta states would reap a disproportionate share of national resources. Multinational oil companies, such as Shell and ExxonMobil, argue the new tax would render their projects unprofitable. Other stakeholders object to the discretionary powers the bill would grant the petroleum resources minister and the governing structures of the National Oil Company, National Gas Company and National Petroleum Asset Management Company, which are proposed to replace the NNPC. The bill's future is thus uncertain. (International Crisis Group 2015). It is believed that the delay in passage of the PIB since 2012, has increased tension in the oil industry in Nigeria between host communities and oil exploration companies.

Several challenges emanate from ineffective grievance management which often catapults into conflict. Energy Information Administration (2012) observes that oil production in Nigeria reached its peak of 2.63 million bbl/d in 2005, but began to decline significantly as violence from militant groups surged, forcing many companies to withdraw staff and shut in production. Okoli & Orinya (2013) opines that while the Niger delta militancy was greatly reduced following the aftermath of the Amnesty deal of President Umaru Yar'Adua in 2009, oil pipeline vandalism (company-community grievance) appears to have escalated both in incidence and impact.

Company –community grievance is as old as the discovery of crude oil in the ancient community of Oloibiri (old Rivers State) now in Bayelsa State. Several reasons have been adduced for the prevalence of grievances and conflicts in the petroleum sector. EIA (2012) records that towards the end of 2009, an amnesty was declared and the militants came to an agreement with the government whereby they handed over weapons in exchange for cash payments and training opportunities and argues that the rise in oil production after 2009 was partially due to the reduction in attacks on oil facilities following the implementation of the amnesty program, which allowed companies to repair some damaged infrastructure and bring some supplies back online. Company – Community Grievance is sometimes attributed to greed on the part of oil host communities in demanding compensations and oil royalties from the MNOC's. Others attribute it to need emanating from underdevelopment, unemployment, neglect, and

frustration. Nwokolo (2009) submits that natural resources conflicts are first and foremost motivated by grievance, which could later transcend into greed motivated. Ikelegbe (2010) argues that in the case of the Niger Delta region, greed or economic opportunities came almost two decades into the conflict and that greed did not cause the conflict but has merely hijacked, perverted, armed and sustained it. Therefore the causality of conflicts may still lie in grievances over injustice, inequality, exclusion, marginalization and negative externalities of resource exploitation. (Ikelegbe, 2010). It could therefore be stated that conflicts do not just erupt, rather conflicts are an outcome of ill-managed grievances.

Energy Information Administration-EIA- (2015) notes that Nigeria especially the Niger Delta region suffers from environmental damage caused by pipeline sabotage from oil theft and also spills from illegal refineries. Poorly maintained, aging pipelines have contributed to oil spills as old pipelines can rupture when they corrode. The amounts spilled because of oil theft versus aging infrastructure and/or operational failures are highly debated among oil companies, environmental analysts, and human rights groups. These are believed to be the major causes of company –community grievances.

The oil spills have caused land, air, and water pollution, severely affecting surrounding villages by decreasing fish stocks, contaminating water supplies, and wearing off arable land. Also, gas flaring and the ambient temperature in the environment and ecosystem could also be responsible for these grievances. Attempt by communities to express their grievance over these forms of unmitigated pollution is sometimes rebuffed by the petroleum companies as in the Ogoniland environmental pollution case. The United Nations Environment Program –UNEP (2011) released a study on Ogoniland and the extent of environmental damage from more than 50 years of oil production in the region by SPDC. The study confirmed community concerns regarding oil contamination across land and water resources, stating that the damage is ongoing. The study further estimated that it could take 25 to 30 years to repair at a cost over $1 billion. This UN report propelled the recent $1 billion clean-up and remediation programme of the Buhari administration which commencedoil producing companies in Nigeria could take the form Management of employee-company grievances and Management of host community-company grievances. Both dimensions are very visible in the profile of grievances in the

nation's petroleum sector. However, this research focuses on the management of grievances between host-community and oil producing companies.

1:2. Statement of the problem

Oil and gas activities have generated varied social and environmental impacts. Extractive industry companies like Petroleum Companies and their investors increasingly see a strong business case for building good relations with employees and host communities, and addressing grievances and potential conflict in a timely and effective manner. This involves engaging meaningfully with staff of the petroleum companies and communities affected by petroleum exploration companies, so as to build trust and to respond appropriately to any major and minor concerns. Grievances and or complaints if left unaddressed may escalate into disputes or even violent conflict. This could be devastating for local communities and the oil producing companies. Thus, the basic problem that necessitates this study include but is not restricted to the perceived poor management of grievances by Petroleum Companies which could lead to disruptions in the production activities of these companies and the attendant loss of huge oil revenue by oil companies and the Federal Government of Nigeria. From the company perspective, it can result in damage to its reputation, a loss of man days, man hours,and operational time and money. It can also put future investment opportunities at risk. On the side of the host communities, ill managed grievances can lead to poor infrastructural development, environmental degradation, pollution, act of militancy, kidnapping of expatriates and fellow Nigerians, unsustainable development, low industrialization,community and economic development, fall in agric production, poor health care, unemployment, and fall in educational standards of the host communities. Effective channels by which local communities can voice their concerns about the operations of a company and get these concerns addressed have been a matter of public disquiet that ignite more grievances which could in turn affect the performance of oil companies, reduce capacity utilization, and lead to loss of manpower.

For decades, Oil host communities in Nigeria seem to have been in conflict with Petroleum Exploration and Service Companies. These conflicts are suspected to emanate from ill managed grievances deriving from lack of basic infrastructure, economic underdevelopment, high poverty levels, deprivation, unemployment, environmental

degradation, and pollution by the Petroleum Companies. Reuters (2006) reported that Kula- An oil host community in Rivers State, Nigeria seized and shut down four flow station of SPDC located in her community and took some expatriates hostage for several days. The community Spokesman Chief Dan Opusingi rationalized their action saying that the community had been neglected, suppressed and marginalized for more than 45 years over her demands for comprehensive sustainable development programmes, youth employment, and capacity building. The hostages were released shortly after government intervention..

ReliefWeb (2009) in partnership with Amnesty International (2009) reported that On 28 August 2008 a fault in the Trans-Niger pipeline resulted in a significant oil spill into Bodo Creek in Ogoniland. ReliefWeb (2009) furthers notes that the oil poured into the swamp and creek for weeks, covering the area in a thick slick of oil and killing the fish that people depend on for food and for their livelihood. A local NGO, the Center for Environment, Human Rights and Development (CEHRD), which investigated the case - including taking video footage of the leak, reported that the oil spill has resulted in death or damage to a number of species of fish that provide the protein needs of the local community (Niger Delta Watch 2009). Video footage of the site showed widespread damage, including to mangroves which are an important fish breeding ground. The pipe that burst is the responsibility of the Shell Petroleum Development Company (SPDC). The community claims that the spill began on 28 August 2008. SPDC has reportedly stated that the spill was only reported to them on 5 October of that year. Rivers State Ministry of Environment was informed of the leak and its devastating consequences on 12 October by CEHRD. A Ministry official is reported to have visited the site on 15 October. However, the leak was not stopped until 7 November 2008 (Niger Delta Watch 2009).

Niger Delta Watch (2009) furthers notes that in October 2008, members of the Bodo community were desperate for action to stop the leak that was destroying their food source and environment. Between 2008 and 2011 the community claimed that numerous efforts were made by the Bodo community (numbering thirty five villages) to seek redress for the oil spill grievance from SPDC but to no avail.

Business and Human Rights watch (2015) reports that in March 2012, the thirty five (35) Niger Delta villages of Ogoni grouped together and sued Royal Dutch Shell

PLC in a British court, claiming that the company's slow response to two spills in 2008 left their delta region soaked in crude oil that destroyed the environment and their livelihoods. (New Jersey Herald, 2012) The suit sought unspecified damages and a legal order for Shell to clean the polluted waterways and marshlands of 35 villages around the town of Bodo in Ogoniland in the Niger Delta. The suit alleges that Shell allowed 560,000 barrels of oil or 88.9 million liters (23.5 million gallons) - to spill over weeks before finally stopping the flow from its malfunctioning pipelines.

In a landmark out of court settlement in London, on Wednesday 7th January 2015, SPDC offered to pay £35m into the bank accounts of local residents in Bodo - an Ogoni community in Gokana Local Government Area of Rivers State, South-south Nigeria, and another £20m for the rehabilitation of Bodo community which was devastated by massive oil spills on land and water in 2008 and 2009. (Business and Human Rights Resource Center, 2015) The payments will be used by the community to generate employment, building public infrastructure, provide employment, and combat environmental pollution in Bodo community. (Business and Human Rights Recourse Center, 2015). The costly embarrassment suffered by SPDC could be seen as a function of her failure to implement an effective grievance management in her operations. Similar cases abound in other nations.

Barrick Beyond Borders (2016) reports that John Ruggie – former UN Representative on Business and Human Rights visited a local community in Peru in early 2006. The report has it that the local community leader after organizing the locals to close down the only access road to a mine which triggered a serious clash with security forces explained to John Ruggie that "they (the Minning Company) paid no attention to us when we raised small problems, so we had to create a big one". From this statement, we may deduce that if companies set up a site-level grievance management mechanism, they could deal with manageable problems that might otherwise escalate. (Barrick Beyond Borders, 2016). These cases depict the outcome of unmanaged grievances by extractive industries.

Amnesty international (2009) notes that the majority of the Niger Delta (south-south Nigeria) has no access to portable water; three-quarters of them have no access to safe water sources; the water system is widely polluted; fisheries and agriculture are damaged as a result of oil spills, waste dumping and other harmful environmental

practices; unemployment is high; and social amenities are inadequate. Amnesty International (2009) regrets that the South-South which is the goose that lays the golden egg (oil and gas) in Nigeria is greatly embattled by high level of unemployment, low employment population ratios, non involvement of local communities in recruitment exercises, and discrimination against local communities in recruitment into key position. Furthermore, the plethora of cases of oil pollution and army of unemployed youths in these communities indicate that there could be poor performance by SPDC in her Corporate Social Responsibility (CSR). A UNDP (2006) report notes that (a) water related diseases account for at least 80% of all reported illnesses in the South-South Nigeria, (b) The region has the highest level of infant mortality in Nigeria. (c) The primary energy source for 73 per cent of the South-South population is firewood as only 34 per cent of the population use electrical lighting (d) Those who are connected to electricity often have to depend on back-up generating sets because of unreliable power supply. Poor housing, inadequate health facilities, and inefficient communication facilities are also notable in these host communities.

UNEP (2011) after her three-year investigation on Environmental Pollution on Ogoniland found:

- Heavy contamination of land and underground water courses, sometimes more than 40 years after oil was spilled.
- Community drinking water with dangerous concentrations of benzene and other pollutants.
- Soil contamination more than five meters deep in many areas studied.
- Most of the spill sites oil firms claimed to have cleaned still highly contaminated.
- Evidence of oil firms dumping contaminated soil in unlined pits.
- Water coated with hydrocarbons more than 1,000 times the level allowed by Nigerian drinking water standards.
- Failure by Shell and others to meet minimum Nigerian or own standards.

The study required emergency measures taken to warn communities and to clean up drinking-water wells. Shell and other companies working in the delta were also advised to overhaul the way they operate. UNEP (2011) further notes the statement of a UN Secretary General and UNEP executive Director Achim Steiner that the report provided the scientific basis for a long overdue restoration of Ogoniland. adding that the study

offers a blueprint for how the oil industry and public authorities might operate more responsibly in Africa and beyond at a time of increasing production and exploration across many parts of the continent.

Corruption and institutional fraud has not aided effective grievance management between the petroleum companies and host communities. The International Crisis Group (2015) reports that Government agencies, political office holders, and local chiefs, are reluctant to release host community development funds for fear that such development could empower some of their local rivals who could out-perform them. Again, charges of corruption and outright theft of host community development funds by some government officials, host community chiefs, and senior management staff of petroleum companies are reported. (The International Crisis Group, 2015). It is also argued that the presence of petroleum companies in host communities act as a stimulant to idleness for youths of these communities as several of them only wait to confront the companies for rents and royalties instead of engaging in a more productive ventures.

Babatunde (2012) contends that economic deprivation and inequality in the Niger Delta oil region of Nigeria engender grievances which could manifest in violence if not well managed. Collier and Hoeffler (2000) suggest that countries whose wealth is largely dependent on the exportation of primary commodities are highly prone to civil violence. The authors posit that conflict may be explained either by grievance or greed, concluding that neglect of grievance management is a major reason for contemporary civil wars

In 1995, Shell International - the parent group of SPDC – in response to demands for Corporate Social Responsibility in the Niger Delta stated; “we do not hold the solution to community demands for more amenities, more development, more employment and more control over oil revenues. That is primarily a government responsibility” (Boele, R., Fabig, H., Wheeler, D., 2001)., The multinational oil giant further noted that her most effective contribution to Nigeria is through the taxes and royalties paid to the Federal Government of Nigeria. By these arguments, Shell International tend to have absolved herself and her agencies from any involvement in the management of the grievances of the host communities, but rather shifts the liability to the Federal government of Nigeria and the host community leadership to whom taxes and royalties are paid.

The International Petroleum Industry Environmental Conservation Association - IPIECA (2012) notes that companies have extensive systems in place to enhance the positive impacts of their activities and minimize the negative ones. This is so with a view to building strong relationships with affected communities in order to facilitate their input into the management of environmental and social issues. Grievance management works to anticipate and resolve potential issues between a company and her employees on one hand and the company and her host communities on the other.

This study is thus embarked upon to call the attention of the oil producing companies and the Nigerian government to the implications of neglecting the management of community-company grievances in the Niger Delta for greater investment returns for the petroleum companies and the Nigerian Government. Grievance Management is expected to provide a means by which employees, host communities or individuals can raise questions or concerns with a company and get them addressed in a prompt and consistent manner. Grievance management serves as an outlet for employee and community frustrations, discontents, and gripes like a pressure release value on a steam boiler.

Employees or communities do not have to keep their frustrations bottled up until eventually discontent causes explosion. They need these grievances managed for a positive outcome.

1.3 Objective of the Study

The major objective of the study is to ascertain the implications of grievance management on the performance of selected oil producing Companies in the Niger Delta region of Nigeria.

The specific objectives are:

1. To examine the extent to which grievance management affect the Profitability of Oil Producing Companies in the Niger Delta region of Nigeria.
2. To determine the implications of grievance management on the market leadership (market share) of Oil Producing Companies in the Niger Delta.
3. To determine the extent to which oil spill affect economic development of host communities in the Niger Delta, Nigeria

4. To ascertain the extent to which pipeline vandalism inhibit sustainable community development of host communities in Niger Delta, Nigeria

For the purpose of this study, Performance is proxied for profitability, productivity, while grievance management is proxied for pipeline vandalism, Oil Spill, Volume of Oil spills, and Number of Fire Outbreaks resulting from petroleum tanker explosion,

1.4. Research Questions

In tandem with the above objectives, the research questions are:

1. To what extent does grievance management affect the Profitability of selected Oil Producing Companies in the Niger Delta region of Nigeria ?
2. What is the implication of grievance management on the market leadership (market share) of selected Oil Producing Companies in the Niger Delta region?
3. What is the extent to which oil spills affect economic development of host communities in the Niger Delta, Nigeria?
4. To what extent does oil pipeline vandalism inhibit sustainable community development of host communities in Niger Delta, Nigeria?

1.5 Hypothesis

Ho_1: There is no significant effect of grievance management on the Profitability of selected Oil Producing Companies in the Niger Delta region of Nigeria.

Ho_2: There is no significant implication of grievance management on the market leadership (market share) of selected Oil Producing Companies in the Niger Delta region.

HO_3: Oil pipeline vandalism does not significantly inhibit sustainable community development of host communities in Niger Delta, Nigeria

HO_4: There is no significant effect of oil spills on the economic development of host communities in the Niger Delta, Nigeria.

The hypotheses of this research are stated in their null (H_0) forms and set to be investigated on 5% level of significant:

1.6 Significance of the Study

This study is important because it will help organizations like SPDC, AGIP and the entire Petroleum sector to identify the importance of effective management grievance for strategic decision making in the oil industry. The study will also assist students, researchers and instructors, organizations and government with literature relevant to grievance management. Again, this study is a significant endeavour in promoting good work relationship between Multinational oil firms in Nigeria and their host communities. Furthermore, this study will act as a guide to Community development practitioners on effective grievance redress mechanisms with extractive industries like oil producing companies in Nigeria.

1.7 Scope of study

The scope of study refers to the parameters under which the study will be operating. In this study, we will investigate the performance of Shell Petroleum Development Company (SPDC) and national Agip Oil Company (NAOC) by assessing their response to the grievances of their host communities in Nigeria. The companies are chosen because they are the dominant multinational companies that have operational facilities in six out of the nine states of the Niger delta region of Nigeria. The study period is 1980 to 2015. This period is considered for two reasons; (i) It allows the researcher to track histories that explain the management of grievance in SPDC and NAOC (ii) The period provides uniform availability of data set for the variables of interest.

Nigeria which has six geo-political zones namely South South, South East, South West, North East, North Central, and North West. The South-South and South East zones which cover about 90 percent of the Niger delta is focus of this research. The Niger Delta is located in the central part of Southern Nigeria. It covers a total land area of 7,000km2 and is the Africa's largest Delta (Shell Petroleum Development Company, Annual Report, 1997). According to Ajibade & Awomuti (2009) more than 1,000 oil fields are located in the Niger Delta Region of Nigeria. With an average production of 5,000 barrels per day (bpd). Petroleum production reached 2.37 million barrels per day in September 2015.

1.8 Limitations of study

The limitations of a study are influences that the researcher cannot control. They are the short comings, conditions, or influences that cannot be controlled by the research that place restriction on methodology and conclusion. Responses to questionnaires are often exposed to wrong positive or wrong negative responses. This research is oblivious of this tendency. Obtaining a larger population sample size and getting the participants to give objective responses to the questionnaires would have enhanced data quality. Interview of more participants would also have generated greater information than just the few that were interviewed. The findings of this research may not be generally applicable in a different location.

1.9 Definition of Key Study Variables

Grievance: Grievance is a concern, dissatisfaction, or complaint raised by an individual or a group within communities affected by company operations which can result from either real or perceived impacts of a company's operations. Such dissatisfaction could be expressed or unexpressed, written or unwritten, justified or unjustified. (IFC, 2009).

Grievance management: Grievance management could be defined as a process or set of formal communication procedure put in place to address host community concerns and complaints within a given period. The process entails receiving, evaluating and addressing grievances from affected communities in a timely and consistent manner at the site or operational level. (Wilson & Blackmore, 2013). Operation or non-operation of the grievance management process by companies could affect the number of oil spill incidence, pipeline vandalism, volume of oil spills, number of fire outbreak incidence, and conflict in the host community.

Host Community: Host communities are those inhabitants, villages, clans, areas, and domains where the oil is extracted from, and houses the facilities for the exploration, extraction and production of oil in the Niger Delta..

Performance: Performance is an observable behavior or action which explains how a function or duty is fulfilled by a person or entity. In this research, performance is a construct which is proxied with such variables as, profitability, productivity, and market share.

Oil Producing Company: An oil producing Company is any registered oil and gas business concern in Nigeria that participates in the upstream and downstream exploration, production, development, and refinement business.

Economic Development: Economic development is the sustained, concerted action of communities, stakeholders, and policymakers to improve the industry base, economic wellbeing , quality of life, and living standards of a specific locality. In this research, economic development is proxied with such variables as agricultural development, sustainable community development, and employment, pipe-borne water, Accessible roads, medical care, social welfare scheme, ICT Facilities, reliable power supply, and industrialization. .

CHAPTR TWO

REVIEW OF RELATED LITERATURE

2.0 CONCEPTUAL REVIEW

2.1.1 Complaint and Grievance Management

Complaints or grievances according to IPIECA (2012) are an expression of dissatisfaction stemming from a real or perceived impact of a company's business activities. Complaints can range from commonly occurring, relatively minor problems to more entrenched or serious ones that have the potential to become a source of significant resentment. When people present a complaint to a company, they generally expect to receive a specific response or remedy. The terms complaint and grievance could at times be used interchangeably without presuming differences in scale, complexity or seriousness (IPIECA 2012). The International Finance Corporation (IFC 2009) defines a grievance as a concern or complaint presented by an individual or a group within communities affected by company operations. Both concerns and complaints can result from either real or perceived impacts of a company's operations, and may be filed in the same manner and handled with the same procedure. The group added that grievance may be said to be dissatisfaction, expressed or unexpressed, written or unwritten, justified or unjustified.

IPIECA (2012) defines Grievance management as processes for systematically receiving, investigating and responding to community complaints at an operational level. When carefully designed, properly implemented grievance management provides significant benefits to both companies and communities. The Centre for Social Responsibility in Mining (CSRM, 2009) defines grievance as a concern, issue or problem that needs to be addressed. She adds that a grievance may be expressed (e.g. through a complaint or protest), and may be individually or collectively based

Wilson & Blackmore (2013) defines a company–community grievance mechanism as a process or set of processes for receiving, evaluating and addressing grievances from affected communities, in a timely and consistent manner at the site or operational level. The mechanism may be wholly or partially run by the company. Grievances might be real or perceived. Wilson & Blackmore (2013) further contends that grievances could arise from within a company or from the community where the company operates. Thus we have employee grievance and oil host community grievance.

Wadhwani (2014) notes that it is mandatory that grievance should be work related and not personal. The author adds that grievances could fall under the following categories: amenities, compensation, condition of work, continuity of service, disciplinary action, fines, leave, medical benefits, nature of jobs, payments, promotions, safety, environment, superannuation, supersession, transfers, and victimization.

2.2.0 THEORETICAL REVIEW

2.2.1 Purpose and Scope of Grievance Management

The international Finance Corporation (IFC 2009) notes that Grievance Management uses the tools of Grievance Redress Mechanism (GRM) to affect host communities of operating companies. Grievance Management also target contractors, suppliers, suppliers or customers. According to Ruggie (2009) a core characteristics of a functioning GRM is that it enables companies to identify minor community incidents before they escalate into unmanageable disputes. Grievance Management creates opportunities for companies and communities to identify problems and discover solutions together.

According to (IFC 2009) credible and effective Grievance management tools are part of a broader framework for business or individuals to redress human rights issues. The United Nation has developed specific principles for managing Griavance among companies for business and Human right. These principles include legitimacy, accessibility, predictability, equitability, transparency, and compatibility with internationally recognized human rights standards. These principles of Grievance management are called the Good Practice Note by the World Bank. The Good Practice Note provides guidance on basic principles and process steps that organization should follow in grievance management. These principles and steps jointly make up a basic requirement and strategy for GRM procedures. The good practice Note are only intended to help companies create a foundation for successful resolution of concerns and complaints in the oil, gas, mining and even manufacturing sectors.

The Global Oil and Gas Industry Association for Environment and Social Issues (IPIECA 2012) notes that wherever companies do business, engaging with affected communities and responding to their concerns is essential to successful performance while ensuring respect for human rights. IPIECA (2012) notes that grievance

management is a process that allows concerns to be raised and remedied adding that these mechanisms benefit companies and host communities by providing an opportunity for concerns to be identified and resolved before they escalate into conflicts. The Grievance Management process when implemented as a strategy contributes to the enhancements of company/communities relationships, reduces risks and operational impacts, and helps avoid potential harm. Community-company/Grievance Managemt encourages companies to champion Corporate Social Responsibilities. The World Business Council on Sustainable Development (WBCSD, 2000) defines Corporate Social Responsibility (CSR) as the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and families as well as the local community and society at large.

2.2.2 Features of Grievance

Chand (2015) identifies five features of grievance as follows:

- A grievance refers to any form of discontent or dissatisfaction with any aspect of the organization.
- The dissatisfaction must arise out of employment or work environment and not due to personal or family problems.
- The discontent can arise out of real or imaginary reasons. When employees or communities feel that injustice has been done to them, they have a grievance. The reason for such a feeling may be valid or invalid, legitimate or irrational, justifiable or ridiculous.
- The discontent may be voiced or unvoiced, but it must find expression in some form. However, discontent per se is not a grievance. Initially, the employee may complain orally or in writing. If this is not looked into promptly, the employee or community feels a sense of lack of justice. Now, the discontent grows and takes the shape of a grievance.
- Broadly speaking, thus, a grievance is traceable to be perceived as non-fulfillment of one's expectations from the organization.

From all indications, grievances could arise from within a company or from the community where the company operates

2.2.3 Causes of Grievances:

Grievances may occur due to a number of reasons:

- ✓ Economic: Employees may demand for individual wage adjustments. They may feel that they are paid less when compared to others. For example, late bonus, payments, adjustments to overtime pay, perceived inequalities in treatment, claims for equal pay, and appeals against performance- related pay awards.
- ✓ Work environment: It may be undesirable or unsatisfactory conditions of work. For example, light, space, heat, or poor physical conditions of workplace, defective tools and equipment, poor quality of material, unfair rules, and lack of recognition.
- ✓ Supervision: It may be objections to the general methods of supervision related to the attitudes of the supervisor towards the employee such as perceived notions of bias, favouritism, nepotism, caste affiliations and regional feelings.
- ✓ Organizational change: Any change in the organizational policies can result in grievances. For example, the implementation of revised company policies or new working practices.
- ✓ Employee relations: Employees are unable to adjust with their colleagues, suffer from feelings of neglect and victimization and become an object of ridicule and humiliation, or other inter- employee disputes.
- ✓ Miscellaneous: These may be issues relating to certain violations in respect of promotions, safety methods, transfer, disciplinary rules, fines, granting leaves, medical facilities, etc.

2.2.4 Effects of Grievance:

Grievances, if not identified and redressed, may adversely affect workers, managers, and the organization.

The effects are as follows:

- ❖ On the production:
  - Low quality of production
  - Low productivity
  - Increase in the wastage of material, spoilage/leakage of machinery
  - Increase in the cost of production per unit

- On the employees:
  - Increase in the rate of absenteeism and turnover
  - Reduction in the level of commitment, sincerity and punctuality
  - Increase in the incidence of accidents
  - Reduction in the level of employee morale.
- On the managers:
  - Strained superior-subordinate relations.
  - Strained management community relations
  - Increase in the degree of supervision and control.
  - Increase in cases of indiscipline
  - Increase in unrest and thereby machinery to maintain industrial peace
- On the host communities
  - Strained community Company relationships
  - Increased hostilities, vandalism and sabotage
  - Lower productivity
  - administrative neglect
  - crumbling social infrastructure and services
  - high unemployment
  - social deprivation and poverty
  - endemic conflict

2.2.5 Effectiveness Principles for Operational Level Community Grievance Management

Effective grievance management rests on a set of fundamental principles designed to promote the fairness of the process and its outcomes. The Effectiveness Criteria for non-judicial grievance mechanisms as contained in the UN Guiding Principles on Business and Human is a veritable tool.

The Effectiveness Criteria states that operational level grievance management mechanisms should be legitimate, accessible, predictable, equitable, transparent, rights-compatible, dialogue-based and a source of learning. These principles are meant to inform both the design of the mechanism as well as the functioning of the process itself. They are meant to be interpreted and applied in a flexible manner depending on the

industry sector and the operating environment. Recognizing the differences that exist between industries, companies and local circumstances, the Effectiveness Criteria describe broad characteristics rather than rigid specifications. These effectiveness principles or criteria for grievance management as approved by the United Nations Human Rights Commission (UNHRC, 2011) are:

- **Legitimacy:** This enables trust from the community or groups for whose use they are intended, and being accountable for the fair conduct of grievance processes.
- **Accessibility**: The instruments should be known to all stakeholder groups for whose use they are intended by providing adequate assistance for those who may face particular barriers to access.
- **Predictability**: Provides a clear and known procedure with an indicative time frame for each stage, and clarity on the types of process, outcomes available, and means of monitoring implementation.
- **Equitable**: Seeking to ensure that aggrieved parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair, informed and respectful terms.
- **Transparency:** Keeps parties to a grievance informed about its progress, and providing sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake;
- **Rights-compatible**: Ensuring that outcomes and remedies are in accordance with internationally recognized human rights.
- **A source of continuous learning**: The grievance management tool draws from relevant measures to identify lessons for improving grievance management and preventing future grievances and harms;
- **Based on engagement and dialogue:** Consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances.

These United Nations Guiding Principles on Business and Human Rights (UNGPs) according to IPIECA (2015) promotes the use, value and power of effective Grievance Management. The oil and gas sector worldwide recognizes the importance of effective

Community Grievance management and is responding positively to the UNGPs' recommendations.

2.2.6 Process Steps for Grievance management

Managing grievances encompasses a step-by-step process as well as assigned responsibilities for their proper completion. In Grievance Management, Companies need to have clear procedures that make filing grievances easy for communities with various levels of literacy and access to infrastructure. Regardless of a project's size and impact, basic principles and steps will remain the same. But the concrete processes behind the steps, as well as resources allocated to implement them, are determined by the extent of project impact and interaction with communities. An effective grievance management mechanism is codified in a set of steps and activities that are easy to follow and understand. The exact process for receiving, investigating and resolving grievances may differ from company to company and location to location. Most mechanisms will, however, follow a series of basic process steps. These steps can be used in company – community grievance management or employee company grievance management.

The IFC (2009) presents the following process steps: Publicizing Grievance Management Procedures, Receiving and Keeping Track of Grievances, Reviewing and Investigating Grievances, Developing Resolution Options and Preparing a Response, Monitoring, Reporting, and Evaluating the Grievance management process.

IPIECA (2012) presents a seven step process as follows:

Receive: Receive at access point and document.

Assess and Assign: Assess rigorously, decide investigation approach, and assign action parties.

Acknowledge: Acknowledge receipt and outline how complaint will be handled.

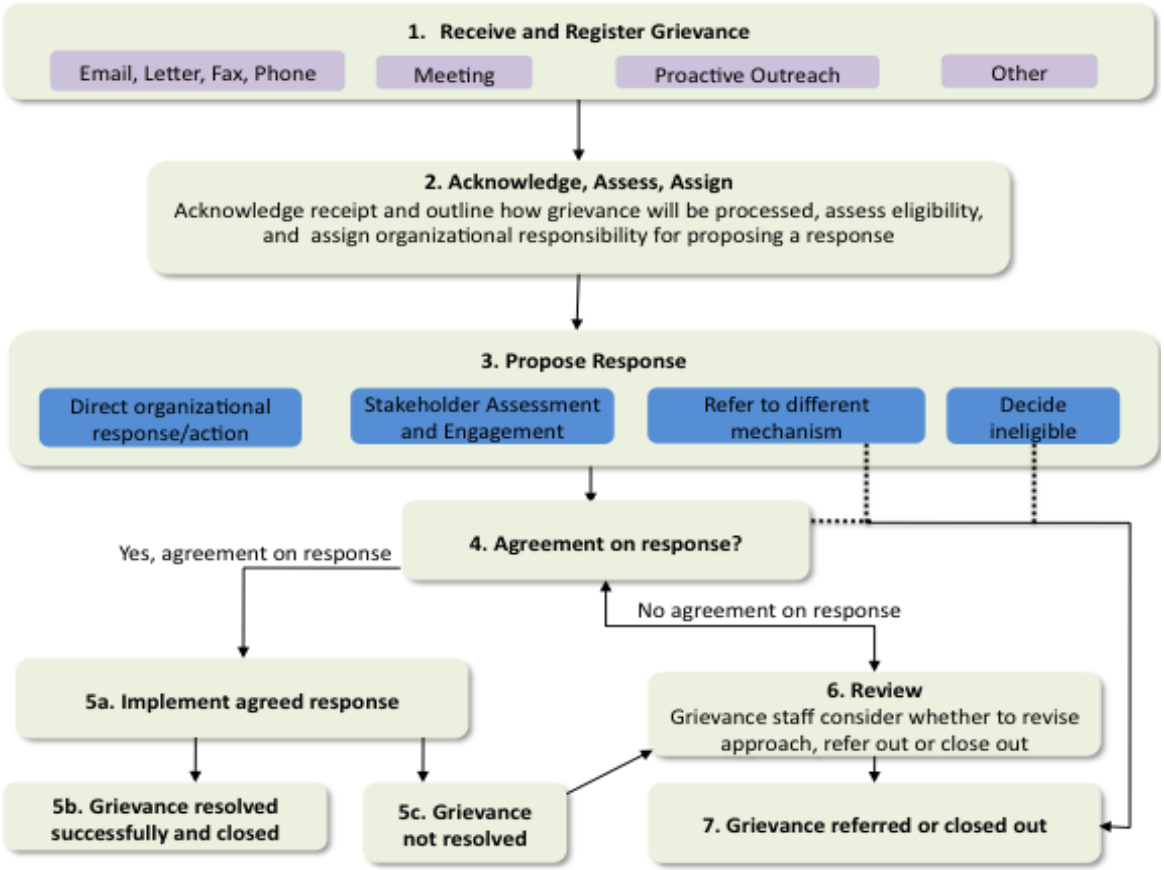
Investigate: Investigate complaint and identify options for resolution.

Respond: Response to complainant, outline investigation findings and proposed action.

Complainant satisfaction or dissatisfaction: .If complainant is satisfied, and then grievance is resolved. But if not satisfied consider alternative action or appeal.

Follow up and close out: Implement resolution, close out, monitor and evaluate.

Figure 2:1 Grievance Redress ManagementMechanism



Source : UN-REDD Programme (2013)

2.2.7 Non- Judicial and Judicial Grievance Redress mechanism.

Non-judicial grievance redress mechanisms are those redress mechanisms that have the mandate to receive complaints and help resolve disputes through formalized processes but are not empowered to produce binding adjudications as in the judicial. On the other hand judicial grievance redress mechanisms resort to a course of action in the law courts. The benefits of judicial mechanisms can include:

- finality of outcome
- enforceability of outcome
- high profile of outcome that may contribute to deterrence of similar behaviour, precedent setting and generating systemic change
- scope for specific remedies

- capacity to deal with large-scale and complex claims
- upholding key human rights goals such as equality, transparency and accountability.

Drawbacks of litigation may include:

- ✓ litigation may not always be an accessible, affordable, timely or effective method of grievance resolution.
- ✓ Sometimes there is no basis in law to found a claim, and even when cases are brought, enforcement of court decisions can be difficult.
- ✓ While the law may facilitate general sanction, aggrieved parties may not always be able to seek personal compensation or reparation.
- ✓ Litigation can also lead to further deterioration of relations between parties.

Non-judicial grievance resolution, by contrast, can have benefits such as being:

- ✓ able to address actual or potential issues and/or abuses of human rights before they escalate into conflict or become the subject of litigation
- ✓ less constrained by pre-determined legal procedures and precedents, able to hear complaints that do not amount to a course of action in law
- ✓ less costly than litigation
- ✓ enable companies to raise their own awareness and learn through direct and/or facilitated engagement with aggrieved community members
- ✓ contribute to earning and maintaining a social license to operate
- ✓ more likely to provide an avenue for finding collaborative and innovative solutions
- ✓ enable those whose lives are affected to claim their rights and participate in the process of advancing their rights. This research employs the use of non-judicial grievance redress mechanisms to resolve complaints for the effective performance of SPDC and

2.2.8 Community –Company Grievance Management

Wilson & Blackmore (2013) define a community-Company Grievance Management as a process or set of processes for receiving, evaluating and addressing grievances from affected communities, in a timely and consistent manner at the site or operational level adding that the process may be wholly or partially run by the company.

Community Company grievances management might be real or perceived and can be addressed through dialogue and provision of timely and accurate information.

Ruggie (2011) in the document "Guiding Principles on Business and Human Rights" defines community-Company grievance management as any routinized, State-based or non-State-based, judicial or non-judicial process through which grievances concerning business related human rights abuse can be raised and remedy can be sought. Hill (2010) defines community-Company grievance management as a company-supported, locally based and formalised method, pathway or process to prevent and resolve community concerns or grievances about the performance or behavior of a company, its contractors or employees. The International Council on Mining and Metals (ICMM, 2009) defines community-Company grievance management as the set of processes a company may have in place to deal with local level concerns and grievances. The International Finance Corporation (IFC, 2009) defines community-Company grievance Management as a process for receiving, evaluating, and addressing project-level grievances from affected communities at the level of the company, or project.

Shift Project (2012) defines an operational-level grievance mechanism as a formalized means for affected stakeholders to raise concerns about any impact they believe a company has had on them, in order to seek remedy. Grievance Management helps to identify problems early, before they escalate, and provide solutions that include remedy to anyone impacted.

2.2.9. Typical Sources of Grievance in Project Communities

Sources of grievance could include:

- Flaws in the consultation process
- Noise and pollution
- Roads and traffic
- Access to natural resources
- Access to project benefits (e.g., no or insufficient jobs created for local communities).
- Access to land, land acquisition, and resettlement.
- Influx and in-migration of workers

- Access roads and heavy traffic
- Security forces
- Indigenous peoples.
- Environmental degradation

2.2.10. Remedy and Operational Level Community Grievance Management

Remedy occurs where there is a concern, issue, complaint or grievance to remediate. Concerns or Issues according to IPIECA (2015) may include requests for information, or general perceptions that may or may not be related to a specific impact or incident. If not addressed satisfactorily, concerns may become complaints. Although concerns do not have to be registered as formal complaints, if raised they should be noted in an appropriate management system so that emerging trends can be identified and addressed through community engagement before they escalate. Complaints or grievances refer to allegations of specific incidents and of any damage, impact or dissatisfaction resulting from company or contractor actions, whether perceived or actual. In this research, the terms 'complaint' and 'grievance' are used interchangeably, without presuming differences in scale, complexity or seriousness. Remediation for Oil and gas companies is the process of providing a remedy for a harm. Remedy can take a variety of forms, including apologies, restitution, rehabilitation, financial and non-financial compensation and punitive sanctions (whether criminal or administrative) such as fines, Also, Remediation emtails the prevention of harm through, for example, injunctions or guarantees of non-repetition. Shift Project (2012) opines that having systems in place to enable remedy is an indicator that the company is able to restore respect for human rights quickly and effectively should impacts occur. Where no agreement can be found on an acceptable remedy, it will usually be appropriate to have a legitimate, independent petition to the courts, engage in an administrative proceeding to higher authorities, or some other mutually-agreed process.

The UN Guiding Principles demands that

- Where a company identifies that it has caused or contributed to negative human rights impacts, it should provide for or cooperate in their remediation through legitimate processes.

- Companies should establish or participate in effective operational-level grievance management process for stakeholders who may be negatively impacted by company activities, in order that grievances may be addressed early and remediated directly.

Petroleum companies have extents and limits of responsibility to which they remediate: When a company has caused or contributed to a har, she has a responsibility to cease her contribution to the harm and provide or contribute to a remedy. Oil and gas companies are not to remedy impacts which they have neither caused. It is the responsibility of those who have caused it to remedy the concern. However, they have the responsibility to use their leverage to prevent or mitigate the risk of the impact reoccurring.

2.2.11. Benefits of A Well functioning Community Grievance Management

Ruggie 2011, presents the following as benefit of a well functioning Company-Community Grievance Management

Table 2.1 Benefits of A Well functioning Community Grievance Management

1	Positive Relationship	It demonstrates a company's willingness to take community concerns seriously, promoting better relationships with stakeholders and contributing broad-based community support.
2	Constructive and non-disruptive	It provides an avenue for affected stakeholders to express concerns in a constructive and non-disruptive manner.
3	Early Warning	Identifies and resolves issues and concerns at an early stage, leading to better management of project impacts and avoidance of potential harm.
4	Prevention and cost saving Orientation	Puts the priority of Grievance Management on prevention of conflict and early intervention, reducing the potential for complaints to escalate into litigation, protests, security incidents or regulatory challenges that could result in costly delays.
5	Risk Reduction	Reduces risks for both local communities and companies.
6	Responsible (Due Diligence)	Serves as a component of company's due diligence processes for identifying and addressing environmental, social and human rights risks and impacts.
7	Learning and improvement	-Serves as key instrument for assessing stakeholder engagement approaches and impacts management, driving improved stakeholder engagement and operational performance. Generates learning from analysing trends and patterns to drive continuous improvements in performance, similar to the way in which the industry manages safety performance.
8	International Standards	Improves alignment with international standards and external expectations—demonstrates company commitment to respect human rights and to a broader system of 'access to remedy', as defined in the UN Guiding Principles on Business and Human Rights3. In particular, the rights of Indigenous Peoples are a priority issue for the oil and gas industry given the location of many operations.
9	Leader Compliance	Meets international lending institution requirements to establish a CGM; also helps lenders and companies prioritize focus for enhanced supervision and due diligence.
10	Change Management and a culture of	Serves as a management tool that drives change and promotes a culture of accountability across business units.

	Accountability	
11	Broader Business Objectives	Links grievance management, prevention and stakeholder engagement to annual business plans and company objectives. Integrates findings from the community Grievance management into operations, social performance plans, non-technical risk plans, stakeholder engagement strategies and communication programmes. Supports broader company objectives to more effectively manage social and environmental impacts and reduce risk.
12	External Reporting	Supports sustainability reporting and provision of performance data for Annual General Meetings and other public events

Source: Ruggie (2011).

IPIECA (2015) notes the growing recognition of the value of grievance Management for companies and communities. The group adds that many managers are now recognizing the value of a system that provides early warnings of potential project impacts and strengthens relations with the neighbouring community. The Oil and gas Corporate Social Responsibility giant lists the following as benefits of Community Company Grievance Management to the company:

1. Improves relationships with neighbouring communities by demonstrating a company's willingness to take concerns seriously;
2. Promotes early identification of concerns, and addresses these where possible, enabling better management of operational impacts and avoiding potential harm;
3. Can increase efficiency by streamlining the informal grievance management process;
4. Reduces value erosion by preventing conflicts from escalating into litigation, protests, security incidents, or regulatory challenges that could result in harm to people, or schedule delays;
5. Improves and demonstrates alignment with international standards and external expectations, including financial lending institutions;
6. Facilitates a learning culture, which analyses trends and patterns to drive continuous performance improvement by reducing repeat grievances and enhancing business decisions

On the other hand the benefits of Grievance management for Communities according to IPIECA (2015) are that:

- ✓ it yields a more consensual than imposed solution;
- ✓ it is of low cost;
- ✓ Has many beneficiaries
- ✓ Has less Adverse effects on communities.
- ✓ Provides a formal but locally focused process for addressing and resolving community concerns or complaints.

Shift Project (2012) notes that an effective grievance mechanism can support the company's due diligence process and help embed respect for human rights across the company, particularly by promoting internal discussions about impacts and how to address them. The authors list the following benefits as derivable from the grievance management process:

- ➢ Helping identify impacts and understand them from the perspective of affected stakeholders – this can directly contribute to the company's impact assessment process;
- ➢ Providing feedback on the perceived effectiveness of company responses to impacts – this can help the company track its performance;
- ➢ – Demonstrating that the company takes the concerns of affected stakeholders seriously – this can help build trust and reinforce relationships with affected stakeholders;
- ➢ – Providing accountability for human rights impacts – this is critical to embedding the company's commitment to respect human rights;
- ➢ – Improving the quality of information available to management about impacts, grievances and community relationships – this can help secure management support for the mechanism;
- ➢ – Illustrating where there may be weaknesses in company policies, procedures or practices – this can contribute to continuous improvement.

2.2.12 Grievance mechanisms and the legal framework

IPIECA (2015) notes that an operational-level community grievance management helps a company and those potentially impacted by its operations to resolve issues in a non-judicial manner. It warns that Community Grievance Mechanisms cannot replace, nor should they impede, access to judicial systems. This means that communities and stakeholder who are impacted by operations of oil or other explorations companies have a right to seek legal redress if they are not satisfied with the outcome of a closed grievance. Thus, operational level grievance redress management offers access to remedy to community members for issues that can be dealt with outside the judicial system. Grievance management is therefore a primary form of remedy where communities have little confidence in the objectivity of a state-run judicial system or where accessing the legal system is complex or inaccessible. Operational-level community grievance Management according to IPIECA (2015) is not designed to handle criminal cases but are a primary non-state based remedy. Access of a complainant or aggrieved party in an impacted community to remedy could be to state based or Non-state based grievance management system. The community grievance management process is derived from the non-state based mechanism.

2.2.13 Key performance indicators (KPI)

IPIECA (2015) presents the following key performance indicators (KPIs) that help measure the effectiveness of the grievance management process in oil and gas companies. These include:

- Number of new/closed cases
- Percentage of cases that were not acknowledged within the specified time frame
- Trends in grievances by type
- Trends in grievances per community/village
- Trends in grievances per department
- Trends in grievances per contractor
- Average resolution time
- Division between true versus false claims
- Number/percentage of company decisions that are being challenged
- Number of court cases

- Trends in repeat grievances associated with the same department
- Trends in non-conformance of company departments with the time frame for investigation

Types of Access points for receiving Complaints could include:

- Face-to-face with company staff
- Through a company office
- By email
- By letter
- Through the company website
- Through a dedicated telephone number
- Through trusted third parties (such as NGOs, fishing associations, etc.)
- Through complaint boxes, e.g. in public places such as libraries, squares, etc.

2.2 14 Drivers for Company-Community Grievance

- **Poor Compliance to GRM by company managers:** One of the biggest activators of company-community grievance in petroleum companies is not the unavailability of the GRM, but the poor compliance by company managers to the effective utilization of the mechanism. Wilson and Blackmore (2013) notes that a key challenge of company-community grievance mechanism is to convince top managers of the use, usefulness, and effectiveness of these mechanism. The author confirmed that personal belief in the inherent value of respecting the rights of individuals and communities can be an important first step for successful implementation of company-community grievance mechanisms.
- **Lack of awareness of available GRM**: Lack of awareness of available GRM by host communities could be a contributory factor to the use of other means such as sabotage, protests and kidnapping to settle grievances. Thise calls for sensitization of host communities.
- **Non-institutionalization of GRM in the structure of petroleum industries.** Another driver for company-community grievance is the non-institutionalization of GRM in the structure of petroleum industries in Nigeria. The Nigerian Human Rights Council (NHRC) is currently on this crusade to demand compliance to the

United Nation Human Right Council (UNHRC) Guiding Principles on Business and Human rights of June 2011.

2.2.15 Grievance Management and Alternative Dispute Resolution (ADR)

Rees (2008) defines an Alternative Dispute Resolution (ADR) as any form of dispute resolution that involves the active engagement of the parties involved with negotiation, mediation, conciliation, facilitation, and arbitrations. ADR focuses on dialogue between parties and the search for sustainable solution that meet the core interest of both parties in which a win-win situation in likely to result thereby saving time and money and possibly preventing future conflicts. Grievance Management when applied does not replace state based judicial and no-judicial forms of remedy or other Alternative Dispute Resolution (ADR) methods. Rather Grievance Management offers a prospect of a more efficient, immediate, and low cost form of dispute resolution for both employees, host community, and company.

IPIECA (2012) offers the Good Practice Survey as a design for the process of Grievance Management for the oil and gas industry. This opinion is substantiated by UN-REDD (2013) which notes that grievance Management is to complement not replace formal legal channels for managing grievance such as the courts, and other Alternative Dispute Resolution (ADR) methods. UN-REDD (2013) further states that the existence of grievance management processes should not prevent communities from purchasing their rights and interest and that citizens should not be required to use grievance management redress mechanisms before seeking redress through the courts and other ADR strategies.

2.2.16 Globalisation and Grievance Management

Globalisation is the internationalization of business such that exchange of goods, services, capital, technology, and knowledge becomes increasingly interconnected. Globalisation increases economic growth and exchange and generates a wider range of products and services through reduction of such barriers to international trade as tariffs, export fees, and import quotas. It is a natural phenomenon in both cultures and markets that allows for synergy through specialization. Thomas Paine (n. d.) states ‘The world is my country’. These famous words by Thomas Paine in the eighteenth century express the idea of a common thread linking all humankind and transcending distances, borders, and

nations. The industrial revolution first, and then globalization, gave that idea new impetus.

Today, we are more connected than we have ever been – because of our travels, our means of communication, and our business exchanges. The private sector has largely contributed to this development. Such that the business activities of our national and multinational companies have woven a complex web of mutual interdependencies. Globalisation is for the better when we derive mutual benefit from our respective advantages but for the worse when what takes place is not an exchange but exploitation.

The European Commission (2012) stated that the European Union is a strong believer in globalisation's potential for positive change. The Commission notes that by harnessing the creative power of people and enterprises across the world, globalisation can improve living conditions for all. She expressed the belief that globalisation needs to take place within a system of international norms in order to ensure its contribution to social and economic development, in full respect for human rights and fundamental freedoms.

The Commission stressed that the United Nations Guiding Principles on Business and Human Rights are an important new step in the development of international norms that will help to realize the full potential of globalisation. Their implementation according to the Commission is integral to the European Union's human rights strategy and to the European Commission's policy on corporate social responsibility. Similarly, European Union Member States have committed to develop their own national plans for implementing the UN Guiding Principles. The Protect, Respect and Remedy Framework was followed by the adoption of the Guiding Principles on Business and Human Rights, unanimously adopted by the UN Human Rights Council, which aim at operationalising the framework. Today, the Guiding Principles represent a key reference document in the field of business and human rights. They contain practical recommendations for each of the stakeholders (European Commission 2012).

The Commission presented the practical guide for oil and gas companies on how to ensure respect for human rights. The guide, which is not a legally binding document, translates the expectations of the UN Guiding Principles into the particular context of the

oil and gas sector. The European Union offers this guidance as a contribution towards global efforts to implement the UN Guiding Principles on Business and Human Rights.
Rees (2008) notes that Recent years have seen a sharp growth in recognition amongst corporations of their actual and potential impact on the human rights of their external stakeholders, be it communities, workers in their supply chains or end-users of their products and services. This has been accompanied by increasing acceptance that they bear a responsibility for avoiding or mitigating negative aspects of that impact. These developments follow a growth in high-profile allegations of corporate abuses of human rights, projected into the public domain through litigation or public campaigns.

CAO (2015) notes that globalisation has brought together over 8,000 companies , fourty of which are from Nigeria including SPDC to sign up the 10 Global Compact Principles, which include principles on the need to support and promote human rights and avoid complicity in human rights violations in grievance mechanism. Any individual, group or organisation can register a complaint against a member company for systematic abuse of the Compact's overall aims and principles. If it accepts a complaint, the Global Compact Office (GCO) will first engage with the company in efforts to address the issues of concern. It may offer its own good offices to encourage resolution of the complaint, seek the assistance of the relevant country network or another organisation for assistance to this end; pass it to a relevant UN entity that has guardianship of the principles in question; recommend it be passed to OECD (Organisation for Economic Cooperation and Development) or ILO (International Labour Organisation) mechanisms; or refer the matter to the Global Compact Board. However, the Global Compact sees its grievance process as primarily a means of generating a response from a company for a person who raises a concern, rather than as a fully-fledged complaint process that follows a grievance through to resolution.(Rees 2008) Other multilateral and multinational agencies performing similar functions as the UN Global Compact include the Compliance/Advisor Ombudsman (CAO), National Human Rights institutions like the Nigerian Human Rights commission, OECD.

In Nigeria globalisation is influencing the Corporate Social responsibility of multinational firms towards effective grievance management. There are several laws, regulations, and policies pertaining directly to the extractive industry. These include the Oil Pipelines Act (OPA), the Petroleum Act, National Oil Spills Detection and Response

Act (NOSDRA), the National Oil Spill Contingency Plan (NOSCP) and the Nigerian Maritime Administration and Safety Control (NIMASA).

Maitland and Chapman (2014) listed some Non Judicial State Grievance Mechanisms in Nigeria to include: National Human Rights Commission, established by statute in 1995 and in 2010 granted greater structural independence and powers. Among these powers is the mandate to receive and investigate complaints of human rights violations and issue binding decisions that are enforceable in the same way as decisions of the high court. Another is the Public Complaints Commission (PCC) established by statute in 1975 and mandated to receive and investigate complaints against public officers. After investigation, the PCC can refer matters for prosecution or disciplinary action, as appropriate.. These Non Judicial State Grievance Mechanisms collaborate to ensure that oil and gas companies in Nigeria follow the global trend of grievance redress mechanism . For example notable efforts were made by the above listed government and non-governmental Agencies in Nigeria to remediate in the Bodo Community Oil Spills by SPDC between 2008 and 2011 when the Bodo Community resorted to legal redress in a Uk High Court assisted by some human rights organizations. The case was settled out of court as SPDC accepted to pay compensation of £55 million to the thirty five villages of Bodo for damages and clean-up..

Again SPDC was indicted for oil spills at the Bonga Oil Field Coast of the Niger Delta in 2011. An estimated 40,000 barrels was spilled during transfer of oil to a tanker off the coast of the Niger Delta. Shell asserts that the spill stopped and was cleaned up before reaching shore. However, a Governmental agency NIMASA accuses SPDC of frustrating attempts to assess oil spill, while NOSDRA asserts that the spill "posed a serious environmental threat to the offshore environment." In 2013: Nigerian Maritime Administration and Safety Agency (NIMASA) estimated that communities affected by oil spill should be compensated N1.04 Trillion (US$6.5 Billion) However, NOSDRA issued a fine of N800 Billion (US$5 Billion) on Shell for the oil spill. Maitland and Chapman (2014)

The influence of Globalization has made multinational corporations give more regard to their corporate social responsibility, institute grievance redress mechanisms in their companies, and to remedy grievances of employees and host communities. However it is not time to celebrate this as the appropriate mechanism for effective grievance

management seems to be farfetched in Nigeria. Maitland and Chapman (2014) concluded that to date, no standing mechanism has been able to offer fair and effective alternative dispute resolution in the context of Niger Delta oil spills. Litigation is often inappropriate to the scale and urgency of spill remediation and compensation, government bodies meant to help facilitate efficient response lack the requisite independence and enforcement powers, and negotiated settlements between companies and communities tend not to fairly compensate harms suffered, address ongoing/future harms or reach all affected persons (often suffering from elite capture). The authors note that there is strong evidence that most spills are not cleaned up, while the environmental consequences continue to undermine health and livelihoods. Thus while globalization has given more wings to host communities in Nigeria to obtain remedy for their grievances much is still desired.

Table 2.2 Population Projections (High) for the Niger Delta States

S/No	State	2005	2010	2015	2020
1	Abia	3,230,000	3,763,000	4,383,000	5106,000
2	Akwa Ibom	3,343,000	3,895,000	4,527,000	5285000
3	Bayelsa	1,710,000	1,992,000	2,320,000	2703000
4	Cross River	2,736,000	3,187,000	3,712,000	4325000
5	Delta	3,594,000	4,186,000	4,877,000	5,681,000
6	Edo	3,018,000	3,51,6000	4,096,000	4,871,000
7	Imo	3,342,000	3,894,000	4,535,000	5,283,000
8	Ondo	3,025,000	3,524,000	4,105,000	4,782,000
9	Rivers	4,858,000	5,659,000	6,592,000	7,679,000
	Total	28,856,000	33,616,000	39,157,000	45,715,000

Source: GTZ projections (2014)

Table 2. 3 Development Indicators for Nigeria (2012)

Population	**Surface area**	**Population density**	**Urban population**	**Gross national income**				**Gross domestic product**	
				Atlas Method		Purchasing Power method			
millions	thousand sq. km	people per sq. km	% of total population	$ billions	Per capita $	$ billions	Per capita $	% growth	Per capita % growth
2012	**2012**	**2012**	**2012**	**2012**	**2012**	**2012**	**2012**	**2011–12**	**2011–12**
168.8	923.8	185	50	242.7	1,440	404.8	2,400	6.5	3.6

Source: World Bank (2013)

Major Multinational Oil Companies (MNOC) in Nigeria's oil and natural gas sectors are Shell, ExxonMobil, Chevron, Total, and Eni (Agip).

Table 2.4 Major Oil Companies operating in Nigeria

S/N	Company	Year of Entry	Nationality	Operations	Main Operating Areas
1.	Shell Nigeria. Shell Petroleum Dev. Company (SPDC)	1937	British/Dutch	43% production is offshore & onshore	Akwa Ibom, Rivers, Delta, Bayelsa, Abia, Imo
2	Exxon-Mobil (Mobil Producing Nig. Unlimited (MPNU)	1955	American	33% Production is offshore	Akwa Ibom, Imo
3	Chevron Nig. (Merger with Texaco 2001)	1961	American	6% offshore & onshore	Warri and Escravos (Delta) Imo, Akwa Ibom,
4	Agip (Subsidiary of ENI)	1962	Italian	Onshore	Delta, Rivers Bayelsa, Imo
5	Total (Merger with Elf)	1962 (as Elf)	French	Onshore	Delta, Rivers

Source: World Bank (Various Issues).

2.2.17 Oil Pipeline Vandalisation and Profitability of Oil Producing Companies in Nigeria

Oil pipeline vandalism in not peculiar to Nigeria alone. According to Anifowoshe,B., Lawler, D., Horst, D.,Chapman, L., (2011), oil pipeline vandalism which is also called oil pipeline interdiction has at one time or another been reported in countries like Indonesia, USA, UK, Canada, Iran, Iraq, Russia, Columbia and Saudi Arabia. Several reason have been deduced for this act of sabotage. Okoli and Orinya (2013) listed the following as causative and predisposing factors of oil pipeline vandalism: Inordinate ambition to amass wealth; Culture of criminal impunity and corruption in Nigeria; Poor policing/protection of oil pipelines; Political sabotages as in the case of Niger Delta militancy; Widespread poverty of the rural and urban-slum diverters, Scarcity of petroleum products; and flourishing petroleum product black market in Nigeria. Also, Onuoha (2008) in Etekpe and Okoli (2010) posited five factors responsible for the growing incidence of pipeline vandalization in the country as follows: The prevalence of poverty and unemployment in the region and country; the emergence of baron or godfathers who induce the vandalization; the defective security apparatus; the official negligence of MNOC's and Federal Government; and the weak legal framework.

But Etekpe and Okoli (2010) argues that the history of oil pipeline vandalization is traced to the general perception from being frustrated as the people are deprived from benefiting from the huge revenue source of the Niger Delta since 1956. Anifowoshe et al (2011) suggested that the high incidence of oil pipeline interdiction in the Niger Delta could be attributed to (a) long history of oil exploration dating back to 1903; (b) the chronology of some major oil spills; (c) indigenous claim of environmental degradation which gives rise to loss of means of community livelihood; (d) river pollution and death of aquatic life due to oil spill; (e) Loss of farm crop yield due to groundwater pollution; (f) unfulfilled promises of social responsibility by oil companies and the government; (g) Loss of income.

The suggested reasons by Anifowoshe et al (2011) are in congruence with the arguments of Etekpe and Okoli (2010). In this land mark research, Amifowoshe et al (2011) concludes as follows.

> To help reduce anger and frustration from indigenous peoples of oil bearing areas, their fair participation in the exploration, production, and transportation of oil and gas might be necessary. Such an approach in Nigeria may help to directly reduce levels of attacks on oil and gas infrastructure, and in addition to the current amnesty programme of the federal government.

The underlying reason why oil pipeline vandalization incidence in the Niger Delta has refused to be abated is the claim and conviction by the oil producing communities of deprivation of a collective resources (oil and gas) by the multinational oil companies and the federal government of Nigeria. This position is in tandem with the submission of Ceccato and Haining (2005) as cited in Anifowoshe et al (2011) who submitted that the presence of "collective resources" as with oil and gas led to higher rates vandalization in Sweden adding that this factor is responsible for the high incidence of pipeline vandalization in Nigeria. This deprivation is also the root cause of the grievances which have led to conflict and militancy in the Niger Delta. This opinion is corroborated by Oyefusi (2007) Ibeanu (2000) Nwokolo (2009) and Oluwatuyi and Ileri (2013). Brume (2006) defended this same thesis of deprivation of a collective resource as follows:

> The cause of oil pipeline vandalization which started in the Niger Delta can be traced to the long history of neglect, marginalization, and repression of the people of Niger Delta by successive governments since the First Republic.The cumulative effect of all this has been the lack of development and widespread poverty, and discontent among the people of Niger Delta. The immediate cause of the growing vandalization is general discontent of the Niger Delta peoples, which has given rise to this unlawful method of recovering or scooping what is seen by many as their oil wealth that is being unfairly carted away to Abuja and other places, while they wallow in abject poverty and unemployment.

Table 2.5 14 Year Pipeline Product Loss in Nigeria &Company Crude Oil Production Figures (2002-2015)

Year	Pipeline vandalisation Loss in Nigeria		Crude Oil Production (Barrels)		
	Value of Product Loss (N million)	Volume of Product Loss (000mt)	SPDC	NAOC	Total
2002	24,755.00	473.94	310,652,553	58,326,741	927,396,602
2003	12,990.00	363.13	330,265,148	57,227,852	908,653,732
2004	19,660.00	396.88	325,064,539	55,526,337	910,156,489
2005	41,615.00	661.81	294,996,169	62,226,035	918,966,736
2006	36,646.00	535.62	162,229,026	53,931,186	869,196,506
2007	17,240.00	242.23	135,504,413	38,833,776	803,000,708
2008	14,594.00	191.62	129,328,995	42,552,843	768,745,932
2009	8,185.00	110.38	99,178,340	37,923,191	780,347,940
2010	6,848.11	194.42	137,681473	37,423,735	896,043,406
2011	12,526.00	157.81	147,602,494	34,626,303	866,245,232
2012	21,484.00	181.67	125,841,702	26,456,664	852,776,653
2013	38,881.33	327.48	104,217,351	19,644,380	800,488,102
2014	44,749.96	355.69	99,178,768	21,756,699	798,541,589
2015	35,038.43	288.28	109,745,940	22,619,247	814,268,781

Source : Adapted from NNPC ASB 2014 – 1st Edition

Data on the oil pipeline vandalisation Product Loss from the NNPC shows that there is marginal indrease in the pipeline product loss in Nigeria while there is a marginal decrease in productivity of SPDC and NAOC within the same period. This inverse relationship ceteris paribus translates to a decline in the productivity of the oil firms within the period under review. It can be argued that if the value of oil pipeline vandalisation drops, there would be an inverse effect on the productivity of the firms.

2.2.18 Petroleum Companies Support for Development of host communities

Table 2.6 Contribution of the legal 3% of annual budget by SPDC to NDDC for Development.

S No	Year	Expected payment (3 %)	Actual Remittance To NDDC	Percentage Remittance	Average Actual Contribution.
1	2001	$ 60.12m	37.2m	61.8%	
2	2002	$ 62.50m	41.3m	66.0%	
3	2003	$ 69.30m	48.6m	70.1%	
4	2004	$ 93.29m	56.2m	60.2%	
5	2005	$120.39m	86,5m	71,8%	
6	2006	$ 87.64m	52.8m	60.2%	
7	2007	$ 68.85m	47.5m	68.9%	
8	2008	$ 82.17m	49.5m	60.2%	
9	2009	$ 92.96m	56.0m	60.2%	
10	2010	$ 61.43m	43.0m	69.9%	
11	2011	$120.89m	65.6m	54.2%	
12	2012	$ 58.12m	31.4m	54.0%	
13	2013	$109.22m	79.8m	73.0%	
14	2014	$150.37m	93.6m	62.2%	
15	2015	$110.17m	74.2m	67.3%	
					59.9%

Source: NEITI & NDDC

Table above shows the difference between the expected 3 percent of annual budget payment of SPDC and the actual remittance made by SPDC as her legal contribution to NDDC. The data shows the SPDC shortchanges the NDDC as she annually fails to meet her legal support to the NDDC. For the fifteen years here reviewed, SPDC contributed only about 60 percent of her legally required support to NDDC.

Table 2.7 Contribution of major oil companies in Nigeria to the revenue of NDDC (2007 – 2011)

S/No	Petroleum Company	2007 (N) B	2008 (N)B	2009 (N) B	2010 (N)B	2011 (N) B	TOTAL (N)B	% of Total
Total Revenue from all Contributors TO NDDC		40.53b	43.57	51.31	44.93	56.07	236.41	100%
1	SPDC	11.5	11.9	13.2	16.5	32.4	85.5	36.1
2	CHEVRON	4.5	4.6	8.7	12.1	11.7	41.6	17.6
3	EXXON MOBIL	6.1	5.8	29.9	18.1	12.9	72.8	30.7
4	NAOC	3.1	1.6	1.8	4.2	2.4	13.1	5.5
5	TOTALFINAELF	2.0	2.8	13.1	15.7	15.8	49.4	20.8
6	ADDAX	4.5	3.4	3.4	4.3	13.7	29.3	12.3
7	ESSO	3.9	1.6	1.2	0.82	1.0	8.5	3.6

Source :NEITI (2012)

Receipts from the oil and gas companies in 2007 accounted for NGN40.531 billion. The oil companies contributed N236.41billion (which should amount to three percent of their budgets for the five year period. SPDC controls 43 percent of all onshore and offshore productions 36.1% of total contribution of oil companies while Exxon Mobil which owns 33 per cent of productions and operates only offshore contributed 30.7 per cent of the income of NDDC in the given period

2.2.19 Nigerian Agip Oil Company (NAOC)

Nigerian Agip Oil Company (NAOC) Is a French owned oil prospecting company which operates in the land and swamp areas of the Niger Delta, under a joint venture agreement with NNPC (60per cent), NAOC (20 percent), and Oando (20 percent) The company has Onshore and offshore operational concessions lying within Bayelsa, Delta, Imo and Rivers States. The concession covers a total area of 5,313sq.km comprising four blocks - OML 60, 61, 62 & 63. NAOC is also the operator of two onshore exploration

leases, namely OPL 282 (90% interest) in the Swamp and OPL 135 (48 per cent interest) in the Land area. NAOC also holds 5% participating interest in SPDC JV with NNPC (55 per cent), The Shell Petroleum Development Company (SPDC) (30 per cent), and Total E&P Nigeria (TEPNG) (10 per cent), with SPDC as operator of the joint venture (AGIP 2015).

NAOC's production asset includes 11 flow stations, 2 gas Plants, I Oil Center and 1 Export Terminal. The flow stations and Gas Plants are connected to the Terminal in Brass through a 460 km pipeline network, while additional 180km pipelines carries NGL and fuel gas to Indorama Petrochemical Company, Eleme. Nigerian Agip Exploration (NAE) was incorporated in 1996 by eni to manage Nigerian deep offshore exploration and production assets. NAE as at 2013 has interests in six offshore blocks in Nigeria, both as Operator (OML 125, OML 134, OPL 2009 and OPL 245) and Co-Venturer partner (OML 118 and OML 135). Nigerian Agip Oil Company (NAOC), benefiting from over 60 year composite experience of eni in natural gas sector, pioneered the conservation and development of the nation's gas resources, and has executed several gas development projects targeted both at the domestic and the export market. Through the implementation of a comprehensive Gas Master Plan, NAOC currently utilize about 93 percent of its produced gas. The Company built the first natural gas recycling plant at Akri-Oguta (in joint venture with Shell). It later invested in large scale Gas injection plant in 1985 with the construction of Obiafu-Obrikom Gas Plant.

AGIP (2015) claims to "emphasize on carefully managing stakeholders' interests and expectations and open a communication channel (adhering to company's stakeholders' engagement procedure and grievance mechanisms) through which we can easily interact with communities, address their concerns and contribute constructively towards their development" The company also claims to Promote local content as one of her core values because she has a passion for the growth and development and believes this is an assured path to Nigeria's sustainable economic development. As part of her Corporate Social Responsibility, the company offers scholarship & bursary scheme to her host community. NAOC also engages in sustainable initiatives in Health Care, Education, rural Infrastructure and water Scheme , with the aim of value creation and contributing to the improvement of the human development indexes in its areas of operation. She also engages in the provision of social infrastructure projects, soft skills and livelihood

programs; and encourage multi-stake holder collaboration when necessary to ensure the sustainability of community development investments. NAOC has in place a procedure for reporting any violation of her guidelines on the respect of human rights and/or other part of our compliance program via a whistle blowing mechanism whereby alleged violations can be reported to Eni via existing grievance channels for ethics or compliance violations

2.2.20 Shell Petroleum Development Company (SPDC)

SPDC is the pioneer oil exploration and producing firm in the petroleum industry in Nigeria. SPDC was originally known as Shell D'Arcy and later shell – BP which was jointly financed by royal Dutch/Shell Group of Companies and the British Petroleum BP Group on an equal basis. The company discovered the first commercial oil field in the country at Oloibiri, Bayelsa State in 1956. Since the, the company has established in Nigeria and grown to one of the world's major crude oil and gas producers.

SPDC currently operates in four of the six south-south states namely Akwa Ibom, Rivers, Delta and Bayelsa. SPDC has 6,000 kilometers of pipelines and flow lines, 87 flow stations, 8 gas plants, and more than 1000 oil wells. The company employs more than 4,500 people directly of whom 95 per cent are Nigerians, 66 per cent of their Nigerian staff members are from the Niger Delta (South-South) Another 20,000 people are employed indirectly through the network of companies that provide supplies and services. SPDC is a the operator of a joint venture agreement involving the NNPC, which holds 55 per cent, shell 30 per cent, (TEPNG) total 10 per cent are AGIP (NAOC) 5 per cent

2.2 21 Oil Host Communities and Community Development

Braide (2013) defines a host community as a community where the oil is extracted from, and houses the facilities for the exploration and extraction of oil. Nigeria's oil and gas producing host communities in December 2009 defined host communities as those villages, towns and clans where oil and gas are being produced. The Ugandan oil Act defines host communities as "inhabitants of the district in which petroleum activities take place."

The Community Development Foundation (UK) defines Community development as a structured intervention that gives communities greater control over the conditions that affect their lives. It is a skilled process and part of its approach is the belief that communities cannot be helped unless they themselves agree to this process. The United Nations (1948) defined Community Development as a process designed to create conditions of economic and social progress for the whole community with its active participation and fullest possible reliance upon the community's initiative.

According to Adekola and Okogbue (2013) SPDC has undergone three paradigm shifts between 1960 and 2013. These include community Assistance (1960 – 1997), Community Development (1998 – 2003), sustainable community development (2004 – Date). In 2006, SPDC introduced the Global Memorandum of Understanding Model (GMoU Model). This is a comprehensive agreement which SPDC holds with any group of communities (Clustered within a geographical area).

According to the Human Development Report (2006) the neglect of host communities by an oil firm is made obvious when oil company's staff live in estates that meet international standards and are adjacent to the deprived thatch houses of host communities. Enemaku (2005) in Adekola & Okogbue (2013) stated that most of the oil producing companies invest in community development activities to different extents, but considering the extreme poverty, deprivation and degradation in the area, most of such efforts are considered insignificant. Adekola & Okogbue (2013) adds that while it would be untrue to say that the companies have done nothing for the communities, it would also be untrue to say that the companies have done much considering the volume of resources that the companies get out of the communities and the glaring poverty and underdevelopment that stares the communities in the face.

An assessment of the performance of petroleum companies in host communities could be done with performance indicators such as development of agriculture, infrastructural development, provision of adequate health care, cottage industries, provision of education Youth empowerment schemes, The petroleum companies could be said to develop education in the host communities if they build well equipped schools, provide science equipments, scholarships, capacity building for teachers, bursary awards, provide skill acquisition and promote school sports. The profitability of the petroleum companies and their market leadership as well as corporate image could als could also be

measure performance. An assessment of the community development initiative of the petroleum companies in host communities could evaluate the availability of markets, health centers, and durable roads with drainage, employment spaces, dependable electricity, and water supply. On the other hand, grievance could be proxied as pipeline vandalisation, work stoppages, man hours lost, fire outbreak due to pipeline vandalisation, loss of lives due to fire outbreaks, Productivity loss, revenue loss,

2.2.22 Grievance and Oil Pipeline Vandalisation

The concepts of oil pipeline vandalisation could be seen as a consequence of unmanaged grievance in the host communities. By the Nigerian constitution, all minerals, oil and gas in Nigeria belong to the federal government. Section 44(3) states that:

> notwithstanding the foregoing provisions of this section, the entire property in and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in the Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly" (Federal Republic of Nigeria 1999). Oil extraction outside the framework of an agreement with the federal government is illegal, as is the possession of crude oil by anyone not licensed to do so. The government has enacted specific laws to address the issue of oil pipeline vandalism and sabotage and, in doing so, have identified the various state and federal security agencies to execute the laws as a way of protecting Nigeria's energy network (Etekpe and Okolo 2010).

The federal government controls revenues from crude oil and sets up a formula for distributing them to the other tiers of government.The Petroleum Production and Distribution (Anti-Sabotage) Act 353 of 1990, for example, defined oil pipeline vandalization or saboteur as any:

> person who does; aids another person; or incites, counsels or procures any other person to do anything with intent to obstruct or prevent the production or distribution of petroleum products in any part of Nigeria;

> or willfully does anything with intent to obstruct or prevent the procurement of petroleum products for distribution in any part of Nigeria; or willfully does anything in respect of any vehicle or any public highway with intent to obstruct or prevent the use of that vehicle or that public highway for the distribution of petroleum products.

Simplifying this definition, Onouha (2008), states that oil pipeline vandalization is "the illegal or un-authorised act of destroying or puncturing of oil pipelines so as to disrupt supply or to siphon crude oil or its refined products for purposes of appropriating it for personal use or for sale on the black market or any other outlet.". It includes such acts as oil bunkering, breaking oil pipelines to siphon fuel, scooping fuel from burst oil pipes and the deliberate act of oil terrorism. This definition can be applied to individuals, groups, and/or company's involved in such illegal activities regardless of their ultimate objectives.Oil pipeline vandalization is often perpertrated through (a) small cargoes that navigate the swampy, shallow waters of the Niger Delta puncturing oil pipelines to siphon the oil into small tanks (b) Stealing crude oil direct from the well head (c) Filling tankers at export terminals (EIA, 2013).

Table 2.8 12-Year Oil Pieline Vandalisation Incidence in Host Communities (2003 – 2014)

Area	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
P/H	608	396	1,017	2,091	1,631	557	382	141	336	336	640	269	**8,404**
Warri	90	241	769	662	306	745	280	161	548	548	317	378	**5,045**
Total	**698**	**637**	**1,786**	**2,753**	**1,937**	**1,302**	**662**	**302**	**884**	**884**	**957**	**647**	**13,449**

Source : Adapted from NNPC ASB 2014 – 2nd Edition,

. Table 2.8. shows that a total of 13,449 pipeline breaks were recorded between 2013 and 2014. Indeed, the incidence of oil pipeline vandalism has been on the rise in Nigeria. According to the 2013 annual report of the Nigerian Extractive Industry Transparency Initiative (NEITI), Nigeria lost a total of 10.9 billion US Dollars to oil theft between 2009 and 2011.This loss highlights the significance of vandalism as a veritable problem in the Nigerian oil industry.

In Nigeria, pipeline vandalisation is usually regarded as an act of sabotage. It is a capital offence under the Petroleum Act and is covered by the Criminal Justice Decree of 1975 (miscellaneous provisions) In recent times, the incidence of pipeline vandalisation and the associated fire disaster has caused serious destruction of the ecosystem of host communities, oil spillage and environmental pollution, destruction of farmlands and properties, and the loss of lives. Oil pipeline vandalism in Nigeria has been perpetrated principally by criminal syndicates who are motivated by the desire to loot oil products for material aggrandizement. According Okoli & Orinya (2013) this organized crime is often aided and ablated by the state agents, which gives it a semblance of a franchise. Oil pipeline vandalism is also known in Nigeria as oil bunkering, which is the act of drilling into the pipelines with the intent to steal products. Pipeline leakages and oil spills are caused by two major phenomena: willful vandalisation and ruptures. Ruptures occur due to diminished pipeline integrity and the aging process of pipes, while pipeline vandalisation are caused by sabotage (Alawode & Ogunleye, 2011).

Oil pipeline vandalisation often leads to a colossal loss of human lives due to attendant fire explosions. Several other losses are also attendant. The implication of this data is that there is the probability that the higher the incidence of oil pipeline vandalism, the higher the death loss and other attendant losses.

Notable effects of of oil pipeline vandalisation include: destruction of farmlands, Population and family displacement, Environmental pollution and degradation, destruction of property of the affected communities, MNOC's, and the State, destruction of vegetation and flora leading to decline in agricultural production, and death loss.

2.2.23 Petroleum Companies, Pollution and Oil Spills in Host Communities.

Section 41 of the Federal Environmental Protection Agency Act Cap.F10 Laws of the Federation 2002 defines pollution as " man-made or man aided alterations of chemical, physical or biological quality of the environment to the extent that is detrimental to that environment or beyond acceptable limits' In this case, oil pollution could be said to be man –made or man aided alteration of the chemical, physical or biological quality of the environment in the course of extraction, storage, or transportation of petroleum products thus releasing contaminants or pollutants on the

environment. There are three major sources of oil pollution in South-South Nigeria. These include oil spills, gas flaring, and effluent and waste discharges.

Pollution of host communities through oil spills by Petroleum Companies in Nigeria is a regular occurrence in oil producing communities. The major causes of oil spills in the host communities include pipelines and flow lines leakage/blowouts, blowouts from well-heads due to poor maintenance, damage and spills from flow-stations, and spills from pipeline or well-heads due to vandalism.

Oil spills release dangerous hydrocarbons into the soil, air, and water ways thus polluting the environment with dangerous health consequences for humans and animals. Unchecked oil pollution has lead to destruction of the ecosystem. Photosynthesis in plant is impaired leading to death of vegetation. Water pollution through oil spill has destroyed the aquatic and marine life of the community killing lots of the fish and driving the rest to the deep waters. The agricultural sector which was the largest employer of labour in the South-South has been destroyed hence youths and women have become jobless. Table 2.9 shows a record of oil total crude oil production and oil spill data between 1980 and 2015.

Since the discovery of oil in Nigeria in 1956, the country has been suffering the negative environmental consequences of oil exploration and exploitation such as oil spills.. Between 1980 and 2015, a total of 11,223 oil spill incidents occurred resulting in the spill of approximately 3,724,000,000 barrels of oil into the environment. Available records from the Directorate of petroleum Resources (DPR) indicate that approximately 6%, 25%, and 69% respectively, of total oil spilled in the Niger Delta area, were in land, swamp and offshore environments.

Table 2.9 Nigerian Oil Production and spill data (1980-2015)

Year	Total Volume of Crude Oil Production (Million bbls)	Total Number of Oil-spills per year	Volume of oil Spills (MB)
1980	752.22	241	558
1981	525.50	238	43
1982	470.68	257	43
1983	450.97	173	49
1984	507.99	216	10
1985	547.09	151	853
1986	535.92	116	553
1987	482.88	225	31
1988	490.44	179	9
1989	626.65	211	6
1990	630.24	180	10
1991	690.98	252	108
1992	716.26	375	55
1993	695.39	458	6
1994	664.62	500	35
1995	672.54	420	69
1996	681.89	177	42
1997	855.73	390	59
1998	806.44	319	30
1999	774.70	637	33
2000	828.19	412	84
2001	859.62	425	120
2002	725.86	444	185
2003	844.10	608	150
2004	911.04	596	100
2005	918.66	670	87
2006	869.19	540	40
2007	803.00	320	26
2008	768.74	212	100
2009	780.34	192	105
2010	890.04	172	24
2011	866.24	203	18
2012	853.77	192	23
2013	800.48	200	21
2014	798.54	201	21
2015	817.33	121	18
Total	**25,367.17**	**11,223**	**3,724**

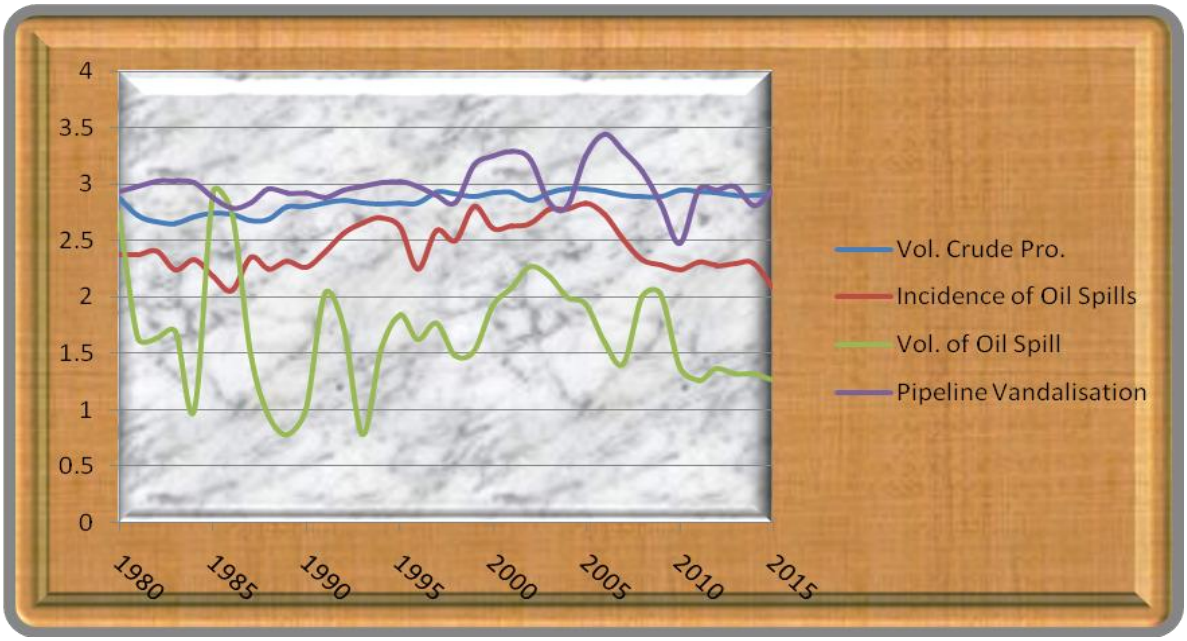
Source: NNPC Annual Statistical Bulletin 2005 & 2014 & SPDC Oil Spill Data

Table-2:10: The *Log of Volume of Oil, Pipeline Vandalisation, Number of Oil Spills and Volume of Oil production in Nigeria for period of thirty-five years (1980-2015).*

Years	Volume of Oil Spills	Oil Pipeline Vandalisation	Number of Oil spills	Volume of Oil Production
1980	0.468	2.936	2.747	2.876
1981	0.475	2.983	1.633	2.721
1982	0.481	3.026	1.633	2.673
1983	0.481	3.026	1.690	2.654
1984	0.479	3.012	1.000	2.706
1985	0.459	2.879	2.931	2.738
1986	0.446	2.790	2.743	2.729
1987	0.453	2.839	1.491	2.684
1988	0.471	2.958	0.954	2.691
1989	0.465	2.919	0.778	2.797
1990	0.465	2.919	1.000	2.800
1991	0.460	2.884	2.033	2.839
1992	0.469	2.946	1.740	2.855
1993	0.475	2.983	0.778	2.842
1994	0.479	3.012	1.544	2.823
1995	0.480	3.021	1.839	2.828
1996	0.474	2.977	1.623	2.834
1997	0.463	2.903	1.771	2.932
1998	0.453	2.837	1.477	2.907
1999	0.501	3.167	1.519	2.889
2000	0.512	3.250	1.924	2.918
2001	0.517	3.289	2.079	2.934
2002	0.508	3.221	2.267	2.861
2003	0.454	2.844	2.176	2.926
2004	0.448	2.804	2.000	2.960
2005	0.512	3.252	1.940	2.963
2006	0.537	3.440	1.602	2.939
2007	0.517	3.287	1.415	2.905
2008	0.493	3.115	2.000	2.886
2009	0.450	2.821	2.021	2.892
2010	0.394	2.480	1.380	2.949
2011	0.469	2.946	1.255	2.938
2012	0.469	2.946	1.362	2.931
2013	0.474	2.981	1.322	2.903
2014	0.449	2.811	1.322	2.902
2015	0.469	2.946	1.255	2.912

Source: Researcher's Computation using excel

Figure 2.2: ***Showing the fluctuations in Volume of Oil, Pipeline Vandalisation, Oil Spills and Volume of Oil production in Nigeria for period of thirty-five years (1980-2015).***



Source: Researcher's Design from Excel.

Descriptive statistics of oil related activities shown in Table 2:10 and Figure 2.2 in log form, indicates volume of oil spills, Incidence of pipeline vandalisation, incidence of oil spills and volume of oil production in Nigeria for period of thirty-five years (1980-2015). The volume of spills in Nigeria show repeated fluctuations within the periods (35years) under study. This can be confirmed from Table 2:10 and figure 2.2. Likewise, there is short-break vacillation in pipeline vandalisation which can be seen from table 2:10 and figure 2.2. This break spans from 2000 to 2015 which covered fifteen years (15years) within the period under investigation. Table 2:10 and figure 2.2 show that there is no significant variation in volume of crude oil production within the review period of thirty-five. These variations in the production of crude oil might be accounted for by divergent exogenous variables that might not be captured by this study. From table 2:10 and figure 2.2, it can be deduced that incidence in oil spills almost follow the same pattern with oil pipeline vandalisation within the same period, that is, 2000 to 2015.

2.2.24 Death Loss due to incidence of oil Fire pipeline Explosions.

Colossal human carnage is also one of the challenges of grievance management derived from oil pipeline vandalism and poverty. Grievance management could go a long way to checkmate these Pipeline explosions which often results from unaddressed grievances. More than three thousand six hundred and twenty six (3,626) persons reportedly lost their lives in the growing oil pipeline explosions and petroleum tanker fires between 1998 and 2015 in Nigeria as seen in Table 2.11.

Table 2.11 Petroleum Pipeline and Oil tanker Fire explosions Disaster Deaths (1998-2015)

S/No	Date	Location	State	Death Loss
1	17th Oct.1998	Jesse	Delta	1500
2	16th July 2000	Warri	Delta	250
3	30thNov 2000	Ebute	Ondo	36
4	5th Nov. 2000	Ibadan	Oyo	200
5	Dec. 2000	Abule Egba	Lagos	60
6	19 June 2003	Onitcha Amiyi-Uhu (Ovim)	Abia	125
7	17th Sept. 2004	Mosimi	Lagos	24
8	13 Jan 2006	Iyeke	Edo	7
9	12th May 2006	Atlas Creek	Lagos	150
10	5th April 2013	Edo	Edo	36
11	26th Dec. 2006	Abule Egba	Ondo	500
12	16th May 2008	Ijegun	Ondo	100
13	May 2010	Amukpe, Near Sapele	Delta	33
14	10th July 2010	Jesse	Delta	250
15	July 12,2012	Okogbe	Rivers	200
16	October 1, 2012	Osisioma, Aba	Abia	15
17	5th April 2013	Edo	Edo	36
18	27th June 2013	Atlas Cove	Lagos	28
19	2013	Arepo	Lagos	7
20	1st June 2015	Onitsha	Anambra	69
	TOTAL			**3,626**

Sources: International Business Times (2015); Onuoha (2007);

2.2.25 Palliative Measures to Host Community Development in Nigeria (2001- 2015)

Balouga (2009) notes that in the pre-independence era the colonial government tried out some palliatives to address the Niger Delta problems. Some of these include the Willinks Commission of 1958, which proclaimed the Niger Delta as “Special Area” in 1959; and

subsequently the Niger Delta Development Board of 195. After independence, the Federal Government set up the Niger Delta Basin Development Authority (NDBDA) in 1976, the Special Fund for Oil Producing Areas by the Revenue Act of 1981, the Presidential Task Force for the Development of Oil Producing Areas (which approved 1.5 per cent Special Fund for the region) and the Oil Mineral Producing Areas Development Commission (OMPADEC) which received 3per cent oil derivation revenue in 1992. Balouga (2009) further opines that the greatest effort was the 13 percent derivation fund in 2000. The Alexander Ogomudia Committee which sat in 2002, recommended 50 percent oil derivation for oil producing states; but this was strongly opposed by legislators from the northern states, who saw it as giving too much to the oil communities.

In 2006, the Federal Government under Goodluck Jonathan formed a committee to empower the people of the Niger Delta by initiating the Nigerian National Petroleum Corporation (NNPC) emphasis on Local Content Development Initiative in the oil industry. To further remedy the problems in the Niger Delta, the Niger Delta Development Commission (NDDC) was established by an Act in 2000. Balouga (2009) adds that the NDDC was established by former president, Olusegun Obasanjo, with the mandate to develop the oil-rich Niger-Delta region through carrying out projects designed to improve the worsening social and environmental conditions of the region.

2.2 26 Changes in Derivation Components of Federal Revenue Allocation (1960-2015) – A Remote cause of Conflict in oil producing Communities

In 1963, regions were entitled to 50 percent of revenues from their resources and a share from the 30 percent accruable to the regions in the distributable pool, the regions share of oil revenues declined considerably after the Nigeria Civil war in 1970 It was at this time that oil host communities being unable to have their grievances heard, increased her militarization agenda. In addition, the federal government in which the region has been largely marginalized takes the huge chunk of above 50 percent leaving the rest to states and local governments. Thus the resource flow into the derivative region declined and was particularly negligible between 1981 and 1999. In reality, the Niger Delta is a

region suffering from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth, squalor and endemic conflict (UNDP, 2006). The percentage of revenue accruable to the derivative states continually declined from 50 percent to 45 percent between 1960 and 1975. It nose dived to 20 per cent by1975 and crashed to 0 per cent by 1981.

This shows a deliberate plan to deny the oil producing states of their God given natural resource. By 1982, a paltry 1.5 per cent was given to the oil producing states which was raised to 3 percent between 1992 and 1999. The three decades between 1970 and 2000 witnessed an upsurge in the Niger Delta militancy signaling a notable grievance by the Niger Delta. The gradual increase from 1.5 percent and 3 percent is a far cry from the 50 percent as obtained before 1970. The present rate of 13 percent since 2000 is not seen as a fair share by the Niger Delta Region.

Table 2.12 Federal and State Shares of Petroleum Proceeds (1960-2015)

S/No	Years	Producing State %	Distributable pool Amount or Federation Account
1	1960-67	50	50
2	1968-71	45	55
3	1971-75	45minus offshore proceeds	55 plus offshore proceeds
4	1975-79	20 minus offshore proceeds	80 plus offshore proceeds
5	1979-81	-	100
6	1982-92	1.5	98.5
7	1992-99	3	97
8	1999-2015	13	87

Source: UNDP 2015

2.2.27 Conflict Management in Oil Host communities

Conflict according to McNamara (2011) occurs with two or more people who, despite their first attempts at agreement, do not yet have agreement on a course of action, usually because their values, perspectives and opinions are contradictory in nature. He

further notes that Conflict can occur: (a) Within yourself when you are not living according to your values, (b) when your values and perspectives are threatened, (c) when there is discomfort from fear of the unknown or from lack of fulfillment. Conflict Management theory states that a healthy conflict management systems should be in place in any organisation. Rahim (2002) submits that the aim of conflict management is to enhance learning and group outcomes (effectiveness or performance in organizational setting). The author adds that it is not concerned with eliminating all conflict or avoiding conflict as conflict can be valuable to groups and organizations.

Ongori (2009) notes that if conflicts are managed properly by applying the best course of action, the organization would increase its performance in terms of utilizing the scarce resources and achieving the organizational objectives. According to the author, conflict could improve decision making outcomes, especially on task-related conflict and group productivity by increasing the quality through constructive criticism and individuals adopting a devil's advocate role. . Shell and Agip as well as the oil host communities therefore need a strategic conflict Management approach to manage the Oil Sector in Nigeria.

McNamara (2011) is in agreement with Rahim (2002) on the five conflict management models stating that there is no one best way to deal with conflict and that It depends on the current situation. McNamara notes that to deal with conflict, the following strategies can suffice:

- You can avoid it: Pretend it is not there or ignore it. Use this approach only when it simply is not worth the effort to argue. Be aware that this approach tends to worsen the conflict over time.

- You can accommodate it: You can give in to others, sometimes to the extent that you compromise yourself. Use this approach very sparingly and infrequently, for example, in situations when you know that you will have another more useful approach in the very near future. Usually this approach tends to worsen the conflict over time, and causes conflicts within you.

- You can compete with the others: You can work to get your way, rather than clarifying and addressing the issue. Competitors love accommodators. Use this approach when you have a very strong conviction about your position.

- Compromising: You can engage in mutual give-and-take. This approach is used when the goal is to get past the issue and move on together.

- Collaborating: You can focus on working together. Use this approach when the goal is to meet as many current needs as possible by using mutual resources. This approach sometimes raises new mutual needs. Collaboration can also be used when the goal is to cultivate ownership and commitment.

The Niger Delta conflict can no longer be avoided or handled by military crackdown by the Nigerian government (competition). Rather a mix of accommodation, compromise, and collaboration by all parties to the conflict may be essential to stem the conflict. UNDP (2006) notes that existing laws in Nigeria prescribe that aggrieved persons can only seek redress against the oil and other big multinational companies engaged in the oil industry in the Federal High Courts, adding that this is another case of collusion between the oil companies and the Government since the courts are located only in state capitals, putting them out of the easy reach of most rural inhabitants. UNDP (2006) further notes that the litigation process is fraught with many technicalities, requiring the services of legal practitioners that most people cannot afford. She opines that the lack of appropriate avenues for redress is one of the major causes of the conflicts in the region. Other grievances arise from the negative social and economic impacts of oil and industrial activities.

Conflict between Petroleum companies, and their host communities in the Nigeria could be broken down into the following indicators or elements:

- ✓ Environmental degradation due to oil spills and gas flaring
- ✓ Denial of employment into key managerial and professional positions for host communities
- ✓ Poor security of lives and property due to oil and gas exploration

- ✓ Ineffective Grievance Redress mechanism
- ✓ Pollution of arable land and water
- ✓ Low level of education in oil host communities
- ✓ Lack of adequate social amenities like water, roads and electricity
- ✓ Marginalisation of host communities in the employment of labour by oil and gas companies
- ✓ Corruption by oil company staff and community leaders
- ✓ Unsustainable exploration activities by host communities
- ✓ Inadequate compensation plans to host communities for project sites
- ✓ Lack of sustainable development in host and neighbouring communities
- ✓ Intimidation of host communities by security forces loyal to the companies
- ✓ Inadequate supervision of companies by government agencies
- ✓ Lack of appropriate avenues for redress.

The availability of the above predisposing factors could be an indicator of a latent or overt conflict.

2.2.28 Sustainable Community Development and Multinational Oil firms

The Seventh Millennium Development Goal of the World bank is to ensure environmental sustainability. Thus Sustainable Community Development is a social responsibility of petroleum companies. The World Commission on Environment and Development in 1987 defined Sustainable development as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Harris (2000) submits that when the World Commission on Environment and Development (WCED) presented their 1987 report titled ‘Our Common Future’, they sought to address the problem of conflicts between environment and development goals by formulating a definition of sustainable development. Harris (2000) suggests that meeting the needs of the future depends on how well we balance social, economic, and environmental objectives--or needs--when making decisions today. The author goes on to

observe that the WCED definition raised a lot controversies and ambiguities. As such, UNEP (1992) defines sustainable development as a means of improving the quality of human life while living within the carrying capacity of supporting ecosystem.. A more embracing definition was that by United Nations University (1996) which sees sustainable development as 'Consisting of policies, strategies, plans, production systems, and technologies used in executing projects and programmes aimed at satisfying real human needs in perpetuity while maintaining environmental quality, biodiversity, the resilience of the ecosystems, and the welfare of all organisms by national, regional, and global levels'. The UNDP (2006) sees Sustainable human development as development that is pro-poor, pro-nature, pro-jobs, and pro-women.. Current development literature seems to be shifting emphasis from sustainable development to sustainable communities

According to Peck and Dauncy (2012) a sustainable community uses its resources to meet current needs while ensuring that adequate resources are available for future generations. The authors add that it seeks a better quality of life for all its residents while maintaining nature's ability to function over time by minimizing waste, preventing pollution, promoting efficiency and developing local resources to revitalize the local economy. Decision-making in a sustainable community stems from a rich civic life and shared information among community members. A sustainable community resembles a living system in which human, natural and economic elements are interdependent and draw strength from each other.

Peck and Dauncy (2012) go on to list the major features of Sustainable Communtiy Development to include: Ecological Protection, Density & Urban Design, Urban Infill, Village Centres, Local Economy, Sustainable Transport, Affordable Housing, Livable Community Sewage & Stormwater, Water, Sustainable Energy and the 3 'R's (Relocation, Reconciliation and Redistribution).

Thus, Sustainable Community Development can be decomposed as

- Use of resources to meet current needs while ensuring that adequate resources are available for future generations.
- better quality of life for all residents while maintaining nature's ability to function over time
- Mnimizing waste,

- Preventing pollution,
- Promoting efficiency
- Developing local resources to revitalize the local economy.
- Ecological Protection,
- Density & Urban Design,
- Urban Infill,
- Provision of Village Centres,
- Sustainable Transport,
- Affordable Housing,
- Livable Community Sewage & Stormwater, Water,
- Sustainable Energy and the
- 3 'R's (Relocation, Reconciliation and Redistribution).

Aghalino, (2014) identifies with the school that believes that oil firms must be responsive to the needs of their host communities in performance of their Corporate Social responsibilities The oil firms in Nigeria claim to have vibrant corporate policy which they have demonstrated in the provision of infrastructures, scholarships, agricultural assistance, employment and economic empowerment of the people through payment of compensations. In response to these claims, Aghalino (2014) notes that these oil firms have always applauded themselves that they have done enough and anything more than this is tantamount to taking over government responsibilities, but on the contrary, oil-bearing communities insist that whatever has accrued to them is, but, a crumb from the master's table.

Balouga (2009) supports this argument by Aghalino (2014) noting that evidence abounds that efforts by oil companies have generally failed to solve the Niger Delta multifarious problems for a number of reasons such as poor grievance management approaches, poor project conception and delivery, discontinuity in government and policies / programmes inconsistency; grossly inadequate funding; and white elephant projects syndrome and duplications. Others include official recklessness and saddening corruption; lack of political commitment; minimal partnering and non-engagement of civil society groups; weak coordination and, therefore, low synergy between tiers of government and development agencies. A coherent and integrated master plan for a

holistic, all-inclusive development of the Niger Delta was drawn in the Niger delta Regional Development Master Plan 2004 which is a blue print for sustainable development in the Niger Delta. UNDP (2006) opines that the devastation of the Niger Delta environment is a result of several decades of oil production, and industrial and infrastructural developments noting that profound changes have often had adverse effects on local livelihoods and social wellbeing.

Odukoya (2006) opines that the goal of development and sustainable development in the Niger Delta and Nigeria are desirable, realistic and achievable given the proper understanding of the under-currents. The author however faults the process in the following words "Two fundamental errors presently characterized the struggle of the people of the Niger Delta; First, allowing their struggle for sustainable development to be informed by the insatiable appetite of the local faction of the Nigerian ruling class among them, who are using them as a tool for negotiation for a larger cut from the national cake which is domicile in their backyard. The second is the failure to situate the developmental struggle of the Niger Delta within the preview of a larger Nigerian agenda". Odukoya (2006) further laments that

> "it is not surprising that the potential wealth of the Niger Delta has turned into an apparent poverty. Majority of the Niger Delta people are living a subhuman life. This is because they happen to be minorities and powerless in the dynamic power calculus between the imperialist forces represented by the multinational oil corporations and the ruling oligarchy in Nigeria. As noted in passing earlier, the environmental degradation by the oil cabals in the Nigerian Niger Delta cannot be otherwise given the conspiracy of state officials and the none existence of environmental friendly laws which is in fact part of the attraction for the operations of the oil companies in Nigeria in the first instance. The result was the destruction of the agricultural life stay of the people while oil spillage continues to make fishing, which is the major traditional occupation of the Niger Delta people both difficult and unprofitable. In the same vein, the criminal flaring of gas in the delta region has led to acid rain with the attendant harmful effects on the people, their environment, vegetation and survival chances. The destruction of the

> terrestrial and aquatic flora of the Niger Delta is no doubt on a genocidical proportion".

UNDP (2006) posits that the deplorable human development situation in the Niger Delta today is aggravated by growing violence and increasingly acute insecurity. Ajibade and Awomuti (2009) observes that with the oil-related legislations such as the Petroleum Act 1969, Oil pipelines Act 1956, Oil in Navigable Waters Act 1968, Federal Environmental Protection Agency Act 1988, and the Land Use Act 1978 in force, the entire property in petroleum (mineral oils) in the oil producing communities is vested in the state. The result is that the federal government has absolute right and control over oil resources in the country, which is found only in the Niger Delta region of the country thus depriving such communities of their natural benefits and hampering sustainable development.

UNDP (2006) further notes that the delta today is a place of frustrated expectations and deep-rooted mistrust The Agency adds that in reality, the Niger Delta is a region suffering from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth and squalor, and endemic conflict. The failure to meet people's expectations of rapid socio-economic development, together with the extravagance of some government and NDDC officials in the region, have inflamed feelings of neglect and deprivation and that environmental quality ranks among the top priorities in the Niger Delta as environmental degradation is arguably a major source of agitation (UNDP, 2006). The Agency is of the opinion that oil and gas extraction has had a severe impact on the Niger Delta environment. and on poor rural and urban communities. The US EIA (2016) corroborates the observations of UNDP (2006) noting that the Niger Delta region suffers from environmental damage caused by pipeline sabotage from oil theft and also spills from illegal refineries. EIA (2016) adds that poorly maintained, aging pipelines have contributed to oil spills as old pipelines can rupture when they corrode. The amounts spilled because of oil theft versus aging infrastructure and/or operational failures are strongly debated among oil companies and environmental and human rights groups SPDC is often accused of deliberately refusing to report oil spill caused by ruptures and operational failures or reporting them as caused by oil pipeline vandalism. Amnesty international (2009) notes that there is evidence to support the fact that an increasing number of oil spills in recent years are caused by

vandalism or sabotage. Amnesty International (2009) however found evidence to substantiate community claims that equipment or operational failures are sometimes wrongly designated as sabotage. Court actions in Nigeria such as Shell v Isaiah (1997) have reached similar conclusions. In this case, the plaintiffs went to court seeking compensation because, during a repair operation on a Shell pipe, which was dented when a tree fell on it, oil leaked on to farmland and in to fishponds. Shell claimed the leak was caused by sabotage. The Appeal Court stated 'The issue of sabotage raised by the defendant is neither here nor there … I am, having regard to the facts and circumstances of this case, convinced that the defence of sabotage was an afterthought. …What is more, there is no evidence whatsoever in proof that the pipeline was 'cut by hacksaw'. Frynas (2009) strongly concurs with Amnesty International (2009) that 'There are indeed strong indications that oil companies in Nigeria have used false claims of sabotage to avoid compensation payments...". Environmental sustainability is fundamental to human wellbeing. Social instability, poor local governance, competition for economic resources and environmental degradation are notable concerns for host communities in Nigeria

2.2.29 Grievance Management and Sustainable Development Goals

The Seventeen Sustainable Development Goals of the United Nations as developed on 25th September 2015 by a gathering of 193 world leaders is committed to achieve 3 extraordinary things in the next 15 years. These extraordinary things include: End extreme poverty, Fight inequality & injustice by ensuring prosperity for all, and Fix climate change. The seventeen Sustainable Development Goals include:

1. No Poverty
2. Zero Hunger
3. Good Health and Wellbeing.
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure

10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life below Water
15. Life on land
16. Peace, Justice and Strong Institutions
17. Partnerships For the Goal

This research is pursuant to Sustainable Development Goals Number 1, 2, 12, 14 and 15.

Goal 1 seeks to end poverty in all its forms everywhere. It calls for an end to poverty in all its manifestations by 2030. It also aims to ensure social protection for the poor and vulnerable, increase access to basic services and support people harmed by climate-related extreme events and other economic, social and environmental shocks and disasters. One of the major drivers of grievance is poverty. Poverty also acts as a challenge to effective grievance management.

Goal 2 seeks to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture. Hunger, food insecurity and unsustainable agriculture could impact negatively on economic development and sustainable community development.

Goal 12 seeks to ensure sustainable consumption and production patterns. Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty. (UN 2015)

Goal 12 (Sustainable consumption and production) aims at “doing more and better with less,” increasing net welfare gains from economic activities by reducing resource use, degradation and pollution along the whole lifecycle, while increasing quality of life. It involves different stakeholders, including business, consumers, policy makers,

researchers, scientists, retailers, media, and development cooperation agencies, among others. This goal if attained could enhance performance of petroleum companies since the companies will produce more with less resource usage.

Sustainable Development Goal 14 seeks to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. It project to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution by 2025. Environmental degradation and pollution of the ecosystem, aquifers and waterways will be done away with through the promotion of this goal. Thus this goal could quicken the elimination of environmental pollution in the Niger Delta swamps and waterways, reduce grievance, and make the management of grievance less cumbersome.

Sustainable Development Goal 15 seeks to protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests, and halt and reverse land degradation and biodiversity loss. The arguments for goal 14 are sustained here.

. According to the World Bank World Development Indicator (2014), ensuring environmental Sustainability addresses the condition of the natural and built environments, reversing the loss of natural resources, preserving biodiversity, increasing access to safe water and sanitation, and improving living conditions of people in slums. The overall theme for these 17 development goals is sustainability -improving people's lives without depleting natural and human made capital stocks.

2.3 Empirical Review

The focus of this review is on the application of grievance management mechanisms and strategies to identify concerns, complaints, discontent and dissatisfaction for redress in host communities for greater performance of oil producing companies.

Daud, Isah, Nor, & Zainol (2013) studied styles of handling grievances among heads of department of a telecommunication companies in Malaysia and the influence of training and experiences in selecting grievance handling styles among managers. A quantitative study was conducted and factor analysis was done to obtain the degree to which given grievance handling styles were utilized by managers. The study revealed that

managers preferred compromising and dominating styles of grievance handling rather than interpreting styles which demanded a long period to perform. The study also found that experience in handling grievance significantly influences the usage of the dominating style amongst managers.

Vermijs (2008) in Wilson and Blackmore (2013) studied company –community grievance mechanism in the oil, gas, mining, and forestry sectors. The study adopted the works of John Ruggie regarding the UN special representatives on business and human right by highlighting the access to remedy needs. The study concluded that there is an increasing amount of literature on company –community grievance mechanism in the public domain. The study further noted that companies have demonstrated willingness to engage researcher's on the analysis of their grievance mechanism but regrets that this is constrained by the absence of long term analysis of the implementation, impact and effectiveness of grievance mechanism.

Nangendo and Fahey (2014) studied the management and monitoring of grievances at an exploration project site managed by Tullow oil in Uganda. The study adopted the Good Practice Note of the International Finance Corporation (IFC) 2009. A gap in the study was that contrary to IFC 2009 recommendations, no grievance redress system was set up at the inception of the project as all grievances were handled on ad-hoc basis. The study found that majority of the grievance cases received were not genuine and thus closed.

Maitland and Chapman (2014) studied compensation and grievance redress mechanism for oil spills in the Niger Delta. The survey research design was used and the study came up with the conclusion that to date, no standing grievance mechanism in the oil sector of Nigeria has been able to offer a fair and effective alternative dispute resolution in the context of the Niger Delta. The research also came up with the finding that the government bodies established to help facilitate grievance redress like the National Human Rights Commission (NHRC), Public Complaints Commission, Police Service Commission, and the National Committee on Torture lack the requisite independent and enforcement powers while negotiated grievance settlements between companies and communities tend not be fair thus causing more harm to affected communities.

The united nation collaboration program on Reducing Emission from Deforestation and forest Degradation in developing countries (REED, 2013) carried out a study to strengthen grievance resolution in developing nations. The study proposed an effective approach to strengthening grievance resolution in these countries.

Babatunde (2012) evaluated the cost of conflict in Nigeria's Niger Delta. Data was collected through field survey. The study found out that grievance management mechanisms as well as conflict management strategies in Niger delta have been defective.

The Centre for Social Responsibility in Mining (CSRM) (2009) funded a study on community complain and grievance mechanism in the Newmount Mining, Ahafo in Ghana and Tinto Aluminum Weipa Operation in Queensland, Australia. The study reveals that grievance handling style embedded in a culturally appropriate community engagement strategy can help strengthen company –community relations. The research also revealed that apart from the six effectiveness principles of grievance management, (legitimate, accessible, predictable, equitable, right-compatible, and transparent), there are other supplementary principles such as engagement and dialogue, culturally-appropriate, proportional, empowering, and continual improvement.

Wadhwani (2014) studied the causes and effect of grievances in small companies in India. The study is descriptive in nature using primary and secondary data. The analysis was done using chi-square, regression and correlation. From her findings, the study concluded that the grievance handling procedure in the selected companies are effective and satisfactory.

Eluka, Chukwu and Mba (2013) investigated the activities of NAOC and SPDC in Nigeria with respect to discharging their corporate social responsibilities in their host communities and by extension enhancing sustainable development. The research design chosen is a combination of the use of secondary data, case study and model formulation. The findings of this study reveal that crude oil production represents the primary reason for the involvement of the NAOC and SPDC in community development. The study further reveals that the profit streams generated by the international oil firms have no significant impact on its level of community development activities in the Niger Delta.

Oluwatuyi, & Ileri, (2013). Studied Petrol tanker and Pipeline vandalisation fire disasters and their impacts on Regional Development in Nigeria. Survey Research design was adopted for the study. The study found petroleum tanker and oil pipeline

vandalisation fires lead to loss of lives and proprety. The study concluded that corruption, hunger, unemployment, and and poor infrastructural development are responsible for the high incidence of pipeline vandalisation in host communities.

Rees, (2008) researched on the barriers to accessing Grievance Mechanisms in project affected communities. The study concludes that barriers to accessing grievance include eligibility of parties, the scale or gravity of admissible grievances, limits on information and awareness, question of trust and confidence on the mechanism. The study concludes that barriers to grievance could be intended or unintended.

Boele, Fabig and Wheeler (2001) studied the Community –Company grievance issues posed by the operations of Shell in Ogoniland, Nigeria. Survey research design was used for the study. The Study found that Shell International has attempted to internalize some learning from the Ogoni Grievance Issues to the extent that it has altered its business strategy in line with principles of sustainable development and its approach to stakeholder dialogue. The Study also found that Shell has recognized the need for cultural change and a more sophisticated attitude to 'political' questions of human rights, environmental responsibility and corporate social responsibility. The study also found that Shell Petroleum Development Corporation in Nigeria may require an alternative approach to sustainable development if they wish to merit the full confidence of communities in areas of the world as complex and distressed as Ogoni. The study noted that the challenge that remains for Shell International is to translate the new corporate strategy and attitudes into effective grievance management action on the ground in Nigeria.

Nwokolo (2009) studied the greed and grievance theory in violent conflicts as advanced by the Collier and Hoeffler, with a view to understanding the role of time and opportunity structure in the escalation of conflict. The paper employed survey research design. The study argues that natural resources conflicts are first and foremost motivated by grievance, which could later transcend into greed motivated. The paper further argues that the tendency of such conflict to move from a grievance motivated conflict to a greed motivated conflict anchors on time and opportunity structure where the grievance is not effectively managed.

Cahn, Sonnenberg, & Zandvliet (2011) also carried out a pilot project on the Carbones del Cerrejón, Guajira Department, Colombia on the development of Effective

Grievance Mechanisms. Survey Research design was used for the study. At the start of Cerrejón's participation in the pilot project, findings are that the company had no formal access point for accepting grievances, no formal or uniform processes for filing grievances, no system for investigating and tracking complaints and no clarity on internal roles and responsibilities. Feedback from both indigenous and non-indigenous communities during the start of the pilot project confirmed that the average community member did not have access to any general grievance mechanism. The development of the grievance mechanism provided a venue for ongoing problems to be formally addressed. For more than a decade, a main irritant for indigenous people in their relationship with Cerrejón has been the company's practice not to compensate for any animals hit by the train transporting coal from the mine to the port. Findings from the study were that a grievance mechanism can never be a substitute for genuine stakeholder engagement, rather, it needs to be a complementary tool. No matter how well designed, and no matter how many resources are allocated to it, the grievance mechanism will not accomplish its objective or be perceived as a legitimate accountability mechanism if it operates in isolation. The case also showed that the development of a policy or Grievance procedure is relatively easy compared to efforts to implement the Grievance procedure and to obtain both internal and external buy-in.

Cahn, Sonnenberg, & Zandvliet (2011) carried out another pilot project on Esquel Garments Vietnam (EGV) to test the United Nations Guiding Principles of Effective Grievance Mechanisms. Survey Research design was used for the study. Findings were that:

- Conducting a regular assessment of the grievance mechanism's effectiveness using clear, key performance indicators and widespread communication of the results of the assessment within the company, including employees at EGV, can support the legitimacy and transparency Principles.
- Another finding was that formalization of the review process could also mitigate any potential perception of familial, intra-company manipulation of the mechanism for the benefit of management, and drive continuous improvement.

Cahn, Sonnenberg, & Zandvliet (2011) further carried out another study on the Sakhalin Energy investment Corporation Ltd in Russia to test the United Nations Guiding

Principles of Effective Grievance Mechanisms. Survey Research design was used for the study. Findings were that:

- Sakhalin Energy had a grievance mechanism consisting of three distinctly different grievance procedures (GP) that were all introduced in 2004 but which were combined into one as part of lender requirements in 2005.
- Sakhalin Energy's experience shows that the SRSG's Principles are robust and supported within the company. At the same time, the company's experiences in working with the Principles also showed the importance of, and scope for, companies finding their own path to meeting the Principles.

2.4 Theoretical Framework

This study is anchored on three set of theories namely Utilitarian Ethical Theory, the social Conflict Theory, and The Social Environment Theory. The utilitarian ethical theory states "that something is moral, or good when it produces the greatest amount of good for the greatest number of people". It is a normative ethical theory that places the locus of right or wrong solely on the outcomes (consequences) of choosing one action/policy over other actions/policies. This theory moves beyond the scope of one's own interest and takes into account the interests of others. To a Utilitarian, the choice that yields the greatest benefits to the most people is the choice that is ethically correct. In other words, the theory seeks as its end the greatest "good" or ("utility") for the greatest number and posits that one should tally the costs and benefits of a given decision and follow the decision that provides for the greatest overall gain. Jeremy Bentham who lived from 1748-1732 and John Stuart Mills who also lived from 1806-1873 were the chief intellectual forces in the development of utilitarianism. In its political philosophy Utilitarianism bases the authority of government and the sanctity of individual rights upon their utility, thus providing an alternative to theories of natural law, natural rights, or social contract. Thus natural rights, and natural law is sacrificed for the public good. This theory might explain the slow action or inaction on the part of the Federal Government of Nigeria in ensuring strict enforcement of oil policies that might require oil multinationals to go a step further in alleviating the plight of host communities to the detriment of huge taxes and royalties to the Federal Government. This is because the greater number of Nigerians

are seen to benefit from the gain of oil wealth as against the lesser number (host communities) who bear the severe social costs.

The social conflict theory also applies in this research. This is a Marxist-based social theory which argues that individuals and groups (social classes) within society have differing amounts of material and non-material resources (such as the wealthy vs. the poor, majority verses the minority) and that the more powerful groups use their power in order to exploit groups with less power. Conflict theory states that tensions and conflicts arise when resources, status, and power are unevenly distributed between groups in society, and that these conflicts arise when the stronger or majority uses her resource to exploit the minority thus becoming the engine for social change. In this wise, the oil companies teams up with the federal agencies to exploit the weak host communities.

The social environment theory attempts to understand how social environments and the individuals who compose them are interrelated. It has as its central tenet that the enterprise reacts to the total societal environment . This theory is in tandem with UNDP (2006) which notes that

> "for years, local people of the Niger delta hoped for protection that never came from successive federal and state governments. Attempts to fight back have at times compounded their environmental challenges. The sabotage of oil pipelines, for example, has only exacerbated oil pollution. The oil companies initially thought they could .buy off people from complaining too loudly about the environmental and socio-economic challenges they face. The companies adopted the practice of paying aggrieved local people whenever complaints arose. But this simply encouraged more and more people to come forward and make claims. The practice undermined community spirit and cohesion, and soon factions and divisions emerged within the different communities"

Thus, the most important characteristics of the theory is the explicit recognition that corporate body responds to political pressures, public opinion, the demands of stockholders, the urgings and threats of legislatures and bureaucrats, as well as to market forces rather than just the common good of the greater population. The above theory is in tandem with the **theory of enlightened ethical egoism** (enlightened self-interest) in which businesses or corporations considers the long-range perspective of others or of

humanity as a whole. The theory of Enlightened Ethical Egoism further notes that it is important to the individual that the world is a 'good' world; therefore, the individual may have a self-interest in curbing pollution or in community projects, even though she or he may not individually and personally benefit from the decision."

2.5 Gap in Knowledge

Several works have been done in the area of Grievance management. Daud et al 2013 studied styles of handling grievances among heads of department in a telecommunication companies in Malaysia; Vermijs (2008) in Wilson and Blackmore (2013) studied company –community grievance mechanism in the oil, gas, mining, and forestry sector; Nangendo and Fahey (2014) studied the management and monitoring of grievances at an exploration project site managed by Tullow oil in Uganda; Maitland and Chapman (2014) studied compensation and grievance redress mechanism for oil spills in the Niger Delta; Wadhwani (2014) studied the causes and effect of grievances in small companies in India; Cahn, Sonnenberg, & Zandvliet (2011) carried out a pilot project on the Carbones del Cerrejón, Guajira Department, Colombia to test the United Nations Guiding Principles of Effective Grievance Mechanisms between August 2009 and December 2010. None of these researches in Grievance management was done with a view to assess the performance of a Nigerian Company as it affects grievance management in the host communities as in this research. Thus, research in Grievance management to assess the performance of Nigerian oil producing companies with her peculiar volatile business environment is wanting. Most researches in the oil and gas sector and on the Niger Delta exploration challenges have tilted more to study conflict management rather than redressing complaints or grievances which could lead to conflict if not managed. This is the gap in this research.

CHAPTER THREE
METHODOLOGY

3.1 Research Design

Research design is a plan, structure and strategy of investigation conceived so as to obtain answers to research questions. This study was carried out using a descriptive survey design. Survey design is a research design which involves the assessment of public opinion using questionnaire and sampling method. According to Alford (2011), Survey design is a measurement process that involves asking questions of sampled respondents in form of interviews or questionnaires and analyzing same.

3.2 Sources of Data

This study combines the full use of secondary and primary data. Secondary data on oil pipeline vandalism, Volume of Oil spill, and annual production volume in the oil producing companies (SPDC and NAOC) were obtained and analyzed. Primary data was obtained using structured questionnaires to obtain information on Economic development, Sustainable Community Development, market share, Thus, the methods triangulation technique is employed in data collection to obtain qualitative and quantitative data for the research through different sources. Carter, Bryant, DiCenso, Blythe, and Nerville (2014) defines triangulation as the use of multiple methods of data sources in qualitative research to develop a comprehensive understanding of phenomena.

3.3 Data Used for the Study

To analyze the models, the following data are required and made available.

Data on Company Turnover for 35years
Data on Company Annual Production for 35 years
Data on Company Profitability for 35years
Data on Oil Pipeline Vandalism for 35years
Data on Grievance Fire Outbreaks for 35 years
Data of Volume of Oil Spills for 35 years
Data on Oil Spill for 35 years
Data on Company Man Hour loss for 35 Years
Data on Export for 35 years

Data on balance of payment for 35 years

Data on Oil Revenue for 35 years

Data on Turnover for 35 years

Data on Import for 35 years

Data on Exchange rate for 35 years

. 3.4 Sample Frame

Research data was obtained on Performance variables such as profitability, productivity, sustainable community development, Economic Development, and market share from 1980 to 2015. Data on grievance management variables such as Oil Pipeline vandalism, Volume of Oil Spill, Number of Oil spills, and Number of Grievance Fire Outbreaks resulting from petroleum tanker explosion were also obtained thirty five years (1980 – 2015).

3.5 Model Estimation & validity in respect of objective 1 and 2

The Validity and reliability of regression instruments was determined using the Ordinary Least Square (OLS) technique which is adjudged by experts as the best linear unbiased estimator. Some Statistical Econometrics were employed to test the validity of the model as follows:

a. T-test: This refers to the test estimated regression coefficient test. In regression analysis, t-test helps us to test the statistical reliability of the regression coefficient as specified in the model and used in the study. It tests whether or not there is a linear relationship between two variables.
b. R^2 Coefficient: This is a statistical measure that gives information about the goodness or fitness of a model. It is the adjusted coefficient of determination.
c. F-test or F-Ratio: This tests the overall significance of regression coefficient
d. Standard Error test: This tests the statistical reliability of the estimated coefficient.
e. Durbin Watson Statistics: This tests for auto-correlation in the residuals from a statistical analysis.

The data in this study is used to test the significance of Grievance management on the performance of oil producing companies in the Niger delta region of Nigeria.

3.6 Model Specification

Two models are specified for this research. These include the profitability equation for objective 1, and the Market Share equation for objective 2. These are shown below:

Profitability Equation

This equation examines the extent to which grievance management affects the profitability of oil producing companies in host communities in the Niger delta region of Nigeria.

$\boldsymbol{PRT}$= f (GFOB, NOSP, MHL, TNOVR, EXCR, IMP, EXP_{t-1},) $^{e}_{t}$ .....(i)

The above can be restated as follows:

$$\boldsymbol{PRT} = a_0 + a_1LGFOB + a_2LNOSP + a_3LMHL + a_4LTNOVR + a_5LEXCR + a_6LIMP_{t-1} + a_7LEXP_{t-1} + {}^{e}_{t} \ldots\ldots(ii)$$

Where:

$^{e}_{t}$ = Stochastic term

$a_0 + a_7$ = Parameter Estimates

LGFOB = Log of Fire Outbreaks resulting from Petroleum Tanker Explosion

LNOSP = Log of oil Spill

LMHL = Log of Man Hour Loss

LTNOV – Log of Turnover

LEXCR = Log of Exchange rate

$LIMP_{t-1}$ = Log of Imports at a particular point in time

$LEXP_{t-1}$ = Log of Exports at a particular point in time

This Profitability equation seeks to ascertain the effect of Grievance management on the Profitability of Oil Producing Companies in the Niger Delta region of Nigeria. The dependent variable which is Performance is proxied for profitability, productivity, sustainable community development, Economic Development, and market share, while grievance management is proxied for pipeline vandalism, Volume of Oil Spill, Number of Oil spills, and Number of Fire Outbreaks resulting from petroleum tanker explosion. The above model construes Profitability to be dependent on Fire Outbreaks resulting from Petroleum Tanker Explosion, oil Spills, Man Hour Loss, Turnover, Exchange rate,

Imports, Exports which are independent variables. Fire Outbreaks resulting from Petroleum Tanker Explosion is an indicator of poor grievance management by the oil producing companies. Oil Pipeline Vandalism is the illegal or un-authorised act of destroying or puncturing of oil pipelines so as to disrupt supply or to siphon crude oil or its refined products for purposes of appropriating it for personal use or for sale on the black market or any other outlet. It includes such acts as oil bunkering, breaking oil pipelines to siphon fuel, scooping fuel from burst oil pipes and the deliberate act of oil terrorism., Profit is the balance arrived at after deducting cost of production and operating activities from income of of a firm. An Oil Spill is the leakage of petroleum products from pipelines and flow lines, blowouts from well-heads due to poor maintenance, damage and spills from flow-stations, and spills from pipeline or well-heads due to vandalism. Production Volume is the total volume of crude oil production of the selected firms. Man Hour Loss is the total number of hours lost by each company in her operations due poor grievance management of the concerns of host communities emanating from , work disputes, shutting down of company operations due to host community grievances. Turnover is the Exchange rate is the equivalent of foreign currencies to the local currency in naira. It is very important in determining product supply and demand, as the higher the exchange rate, the higher the cost of production and vice versa. Export for the period under study signifies the amount of goods sold outside a country. It is a major source of foreign exchange to firms.

Market Share Equation

This equation examines the implication of grievance management on the market Leadership (Market Share) of oil producing companies in host communities in the Niger delta region of Nigeria.

$$\boldsymbol{MKTS} = f(OPV, EXCR, OLREV, TNOVR, BOP, IMP_{t-1}, EXP_{t-1},)\ {}^{e}_{t} \quad \text{.....(i)}$$

The above can be restated as follows:

$$\boldsymbol{MKTS} = a_0 + a_1 LOPV + a_2 LEXCR + a_3 LOLREV + a_4 LTNOVR + a_5 LBOP + a_6 LIMP_{t-1} + a_7 LEXP_{t-1} + {}^{e}_{t} \quad \text{.....(ii)}$$

Where:

${}^{e}_{t}$ = Stochastic term

$a_0 + a_7$ = Parameter Estimates

LOPV = Log of Oil Pipeline Vandalism

LEXCR = Log of Exchange rate

LOLREV = Log of Oil Revenue

LTNOV – Log of Turnover

LBOP - Log of Balance of Payment

$LIMP_{t-1}$ = Log of Imports at a particular point in time

$LEXP_{t-1}$ = Log of Exports at a particular point in time

This Market Share equation seeks to ascertain the implication of grievance management on the market Leadership (Market Share) of oil producing companies in host communities in the Niger delta region of Nigeria. The dependent variable which is Performance is proxied for market share, while the Independent Variable (grievance management) is proxied for pipeline vandalism, Volume of Oil Spill, and Number of Oil spills. The above model construes Market Share to be dependent on Number oil Spills, Oil Pipeline Vandalism, Volume of Oil Spills, Turnover, Exchange rate, Imports, Exports which are independent variables. Oil Pipeline Vandalism is the illegal or un-authorized act of destroying or puncturing of oil pipelines so as to disrupt supply or to siphon crude oil or its refined products for purposes of appropriating it for personal use or for sale on the black market or any other outlet. It includes such acts as oil bunkering, breaking oil pipelines to siphon fuel, scooping fuel from burst oil pipes and the deliberate act of oil terrorism. An Oil Spill is the leakage of petroleum products from pipelines and flow lines, blowouts from well-heads due to poor maintenance, damage and spills from flow-stations, and spills from pipeline or well-heads due to vandalism. Balance of Payment (BOP) is a systematic statistical record of the economic transactions between the residents of one country and those of the rest of the world during a given period of time-usually one year. The BOP data presented here is the per centage of Gross Domestic Product. Exchange rate is the equivalent of foreign currencies to the local currency in naira. It is very important in determining product supply and demand, as the higher the exchange rate, the higher the cost of production and vice versa., Export for the period under study signifies the amount of goods sold outside a country. It is a major source of

foreign exchange to firms. Import is the value of goods brought into a country from foreign countries through exchange.

3.7 Population of Study

The population of the study refers to the totality of all the elements or variables under study from which the researcher draws his sample. Nigeria and indeed the Niger Delta area has several Petroleum companies operating in their host communities among whom are Shell, ExxonMobil, Chevron, Total, and Eni (Agip); the Nigerian National Petroleum Corporation (NNPC). SPDC has operations in six states namely Abia, Akwa Ibom, Bayelsa, Delta, Imo, and Rivers. While AGIP has operations in four states which include Bayelsa, Delta, Imo, and Rivers. The study population is comprised of 98,325 residents of oil producing communities in Bayelsa and Rivers, Imo and Abia states where SPDC and AGIP operate.

Table 3.1 Population of the Study

S/No	State	LGA's	Population	Communities	Population
1.	Bayelsa	Southern Ijaw	321,808	Peremabiri	9,655
2	Bayelsa	Yenagoa	352,285	Ikarama	4,688
3	Bayelsa	Ekeremor	269,588	Gbemo Angalabiri	6,300
4	Rivers	Gokana	228,832	Bodo city	20,652
5	Rivers	Ikwere	189,726	Umunwei	4,206
6	Rivers	Emohua	201,901	Ibaa/Omuizo	14,851
7	Imo	Oguta	142,340	Izombe	8,540
8	Imo	Oguta	142,340	Abaziem	5,017
9	Imo	Ohaji/Egbema	182,891	Egbema	4,340
10	Abia	Ukwa West	88,555	Umuorie	5,281
11	Abia	Ukwa West	88,555	Owaza	8,265
12	Abia	Ukwa West	88,555	Uzuaku	6,530
Total Population					98,325

Source National Population Commission (Various Issues)

Justification for the selection of the above twelve communities in table 3.1 above are based on the availability of SPDC and NAOC oil production operational facilities in the communities. Also the various states and Local government areas are chosen because there are SPDC and NAOC oil production operational facilities in those communities.

3.8 Sampling Size and Sampling Technique.

The sample refers to a unit or subset of the population under study. The sample size for this study is 398 residents of the oil producing communities. This is generated using the Taro Yamane sampling technique. The formula states thus:

$n = N/ 1 + N (e)^2$

Where; n = sample size

N = Population

e = error of sample $(.05)^2$

1 = unity of constant

Therefore;

$$n = \frac{98{,}325}{1 + 98{,}325(0.0025)}$$

$$n = \frac{98{,}325}{1 + 245.8125}$$

$$n = \frac{98{,}325}{246.8125}$$

n = 398 **~ n = 400 (approximation)**

The proportionate sample of each community was determined with equation 2.

$$n_s = \frac{n_o \times n}{N}$$

Where: n_s = proportionate sample of each senatorial districts

n_o = Total population of each district

n = Total sample size already determined

N = Aggregate population of the registered communities.

Table 3.2. Proportionate sampling for each Community.

S/N	Name of State/ LGAs			Allotment of Questionnaires based on Community size
1	Bayelsa	Southern Ijaw	Peremabiri	(9,655/98325)*400 = 39
2	Bayelsa	Yenagoa	Ikarama	(4,688/98325)*400 = 19
3	Bayelsa	Ekeremor	Gbemo Angalabiri	(6,300/98325)*400 = 26
4	Rivers	Gokana	Bodo city	(20,652/98325)*400 = 84
5	Rivers	Ikwere	Umunwei	(4,206/98325)*400 = 17
6	Rivers	Emohua	Ibaa/Omuizo	(14,851/98325)*400 = 60
7	Imo	Oguta	Izombe	(8,540/98325)*400 = 35
8	Imo	Oguta	Abaziem	(5,017/98325)*400 = 20
9	Imo	Ohaji/Egbema	Egbema	(4,340/98325)*400 = 18
10	Abia	Ukwa West	Umuorie	(5,281/98325)*400 = 21
11	Abia	Ukwa West	Owaza	(8,265/98325)*400 = 34
12	Abia	Ukwa West	Uzuaku 380	(6,530/98325)*400 = 27
	Total			**400**

Source: Field Survey 2017

Note: *Symbol denotes multiplication sign.

3.9. Method of data collection

The researcher used structured questionnaires in data collection. This was done with the help of (4) research assistants comprising of (two males, and two females). They were trained on the study objectives and on how to administer the instruments. Two weeks were given to the respondents to enable them have adequate time to go through and complete the instrument. From the distributed questionnaire, the researcher was able to retrieve 382 out of the 400. Besides the structured questionnaires, secondary data on pipeline vandalism loss and production figures of SPDC and NAOC were also obtained from statistical bulletins and analyzed.

3.10. Validation of Survey Instrument

A copy of the questionnaire was giving to a research expert for content validation. The researcher requested from him the following; to examine language appropriateness, adequacy of the question items in relation to the objectives and hypothesis of the study. The expert comments and observations were taken care of by the researcher such that the instrument was restructured in line with the comments of the expert. The researcher presented the research topic, purpose, research questions and hypotheses with the draft

instrument to the expert and requested him to consider the length of the entire instrument and suitability of the items; and to freely restructure instrument adding and deleting items as the research expert deemed fit to ensure that the instrument serves its purpose effectively. The expert agreed with the disclosure requirements of the instrument checklist. The final copy of the instrument checklist was approved by the supervisor for the study.

3.11. Reliability of Survey Instrument in respect of objectives 3 and 4

The reliability is the degree to which the items that make up the instrument or scale are all measuring the same underlying attribute consistently. **:** A research expert was used to assess the face and content validity of the instrument. Test for instrument reliability was also done. The Chronbach Alpha reliability test was done for the test instrument and a general reliability statistics of .786 was obtained for all items. This reliability coefficient is acceptable for the social sciences since it is above .70

3.12 Method of Data Analysis

Data generated were presented in tables, histograms, bar chart, pie charts and percentages. Multiple regression analysis was employed to test hypothesis 1 and 2 while Pearson Moment Correlation, t-statistics were also employed to test hypotheses 3 and 4, respectively. The formula for calculating Pearson Moment Correlation coefficient is:

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{(n\Sigma X^2 - (\Sigma X)^2 \ (n\Sigma Y^2 - (\Sigma Y)^2}}$$

r = correlation coefficient to be determined

$\sum$ = summation sign

X = Independent variable in the paired observation

Y = Dependent variable in the paired observation

n = number of paired observations

$\sqrt{\square}$ = *square root*

Decision Rule

At 5 per cent level of significance, if the calculated t-value was greater than the positive critical t-value or less than the negative critical t-value, the study would reject the null hypothesis and accept the alternate hypothesis, but if the calculated t-value was less than the positive critical or greater than the negative critical t-value, the study would accept the null hypothesis and reject its alternate. Under n-2degree of freedom (2-tailed), the positive critical t-value was 1.96 and the negative critical t-value was -1.96. In the case of multiple regression, if the coefficient of the explanatory variable was significant at $P<0.05$, the study would reject the null hypothesis and accepts the alternate and vice versa.

CHAPTER FOUR

4:1. DATA PRESENTATION AND ANALYSIS

This chapter presents the data used for analyzing the studied variables for SPDC and NAOC for possible empirical investigation. Multiple regression analysis was employed to test hypotheses one and two (1&2) while Pearson Moment Correlation, and t-statistics were employed to test hypotheses three and four (3&4). These instruments were employed to provide solutions to the research questions on grievance management and profitability of the selected oil producing companies in Niger Delta, Nigeria between 1980 and 2015.

To analyze the profitability regression for SPDC, table 4.1.1 is presented. The first column in table 4.1.1 represents the number of years covered in the study. The second to the eleventh columns, which are dependent and independent variables represent Fire Outbreaks resulting from Petroleum Tanker Explosion. Oil Pipeline Vandalism, Profits, oil Spill, Volume of Oil Spill, Production Volume, Man Hour Loss, Turnover, Exchange rate, Import and Export for the period under study.

Descriptive statistics for the survey research (objectives 3&4) showing respondents' state of origin, occupations, age brackets, and educational qualifications were presented in tables 4.2.1 – 4.2.5.

4.1. Data Presentation for Profitability

Table 4.1.1 Stylised Facts for Profitability of SPDC

Year	IMPT	VOS	NOS	GFOB	OPV	EXPT	EXCR	MHL	TNOV	PRDT	PROF
										Barrels	N 000, 000
1980	3370	558	241	20	337	10860	0.55	22457	426515	567.017,922	3,538,883
1981	4328	43	238	15	432	26500	0.61	22345	323781	462,784,788	3,342,903
1982	4556	43	257	34	455	30205	0.67	34770	356218	456,871,097	4,155,098
1983	3775	49	173	57	377	33202	0.72	57315	202419	364.378,210	3,278,476
1984	3563	10	216	34	356	46220	0.65	24750	218520	526,876,320	3,098,346
1985	3763	853	151	17	376	257802	0.89	59440	235616	465.492,910	3,463,478
1986	4320	553	116	15	432	200730	2.06	52810	3376508	538654,992	3,228,210
1987	4758	31	225	17	475	148421	4.02	42799	2433951	52,8673,910	3,220,987
1988	5525	9	179	33	552	227870	4.54	30651	2667330	534,973,269	3.,874,002
1989	5374	6	211	25	537	171075	7.39	38420	2567405	638,763,836	2,983,945
1990	4516	10	180	80	451	209062	8.038	35280	2675546	528,991,367	3,122,883
1991	5580	108	252	63	558	188045	9.910	42901	3121408	536,985,270	3,124,690
1992	7460	55	375	45	746	128860	17.10	42175	5326148	531,849,336	2,998,367
1993	5682	6	458	57	568	167580	21.89	44260	6838706	563.983.966	2,387,091
1994	7953	35	500	57	795	173325	21.89	238092	8998631	473,871,800	2,389,356
1995	8826	69	420	73	882	213420	21.89	216708	1933214	563,882,985	2,376,901
1996	7328	42	177	29	732	250062	21.89	225838	2702719	362,652,882	2,730,339
1997	5220	59	390	60	522	214759	22.89	224610	2801973	383,882,782	2,389,012
1998	6389	30	319	10	638	207633	22.89	204361	2708431	412,873,127	2,578,009
1999	5272	33	637	16	527	225690	92.69	215498	3194015	343,556,293	2,223,489
2000	6460	84	412	20	646	218560	102.1	232210	4582127	372,553,880	1,873,981
2001	6230	120	425	19	623	231759	111.9	248522	4725086	320,345,178	1,723,091
2002	5585	185	444	13	558	214378	121.9	236541	6912381	310,652,553	1,006,514
2003	6984	150	608	54	698	237456	129.4	248801	8487032	330,265,148	1,174,092
2004	6379	100	596	35	637	224979	129.4	248505	11411067	325,064,539	1,605,998
2005	17861	87	670	18	1786	215490	133.5	246262	14572232	294,996,169	1,591,515
2006	27530	40	540	21	2753	236688	132.1	251608	18564595	162,229,026	1,184,271
2007	19370	26	320	64	1937	214589	128.7	253819	20657318	135,504,413	1,168,725
2008	13026	100	212	43	1302	224700	131.4	473308	28842171	129,328,995	1,422,360
2009	66209	105	192	82	662	226589	130.7	428751	22688028	99,178,340	847,752
2010	30280	24	172	23	302	228691	130.3	522690	24062505	137,681473	1,579,473
2011	88450	18	203	62	884	227532	155.8	418742	25197568	147,602,494	2,432,193
2012	88408	23	192	52	884	226008	156.7	628914	34630037	125,841,702	2.194,702
2013	95787	21	200	65	957	223660	156.7	624381	24913802	104,217,351	1,728,965
2014	64750	21	201	70	647	226099	157.3	631869	13688403	99,178,768	1,570,991
2015	52802	18	121	76	528	230510	157.0	721148	13688403	109,745,940	1,081,778

Source: Publications of SPDC, NBS, CBN, NNPC for various Years

Note:
GFOB = Fire Outbreaks resulting from Petroleum Tanker Explosion
OPV = Oil Pipeline Vandalism
PROF = Profits
NOS = oil Spill
VOS = Volume of Oil Spills
PRDT = Production Volume
MHL = Man Hour Loss
TNOV –Turnover
EXCR = Exchange rate
IMPT = Imports
EXP = Exports

Table 4.1.2 below analyzes the Profitability regression for NAOC, The regression Table is run to provide solution to the research questions in respect to grievance management and profitability of NAOC in the Niger Delta region of Nigeria. The first column in the table represents the number of years covered in the study which is 1980-2015. The second to the eleventh columns, show the dependent and independent variables such as Fire Outbreaks resulting from Petroleum Tanker Explosion. Oil Pipeline Vandalism, Profits, oil Spill, Volume of Oil Spill, Production Volume, Man Hour Loss, Turnover, Exchange rate, Import and Export for the period under study.

Table 4.1.2 Stylised Facts for Profitability of NAOC

Year	IMP	MHL	VOS	NOS	OPV	EXPT	EXCR	GFOB	TNOV	PDTN	PROF
										Barrels	N 000, 000
1980	24790	56201	558	241	293	23510	0.55	10	2379027	92,396,602	772,998
1981	26392	68236	43	238	279	22659	0.61	23	2363044	90,653,732	692,340
1982	34521	63283	43	257	312	26582	0.67	54	2486312	91,156,489	662,955
1983	30147	64804	49	173	524	26498	0.72	21	2143158	91,966,736	637,992
1984	32569	64727	10	216	674	24741	0.65	43	2528570	86,196,506	587,984
1985	34586	65430	853	151	532	28054	0.89	20	3266130	80,000,708	521,983
1986	52740	64333	553	116	354	23166	2.06	34	3572084	76,745,932	562,983
1987	53751	65654	31	225	217	35486	4.02	12	3256101	78,347,940	476,983
1988	52332	52700	9	179	541	34288	4.54	24	3736464	89,043,406	442674
1989	52780	55421	6	211	843	35470	7.39	31	3367227	86,245,232	466837
1990	53164	54830	10	180	213	35129	8.038	32	3134628	85,776,653	423,941
1991	52273	53217	108	252	567	42679	9.910	58	3673920	80,488,102	465,779
1992	53280	52362	55	375	417	44328	17.10	21	4528101	79,541,589	380,348
1993	55639	52318	6	458	474	41783	21.89	34	4864332	81,268,781	349,973
1994	48318	57632	35	500	293	42780	21.89	18	4638205	83,367,983	238,178
1995	47221	59730	69	420	279	43558	21.89	22	4648310	73,376,980	437,873
1996	62801	74933	42	177	312	48489	21.89	13	4763920	78,984,903	332,287
1997	63328	68541	59	390	524	43960	22.89	31	5254178	72,463,233	472,873
1998	62485	64328	30	319	674	447591	22.89	13	5321864	70,982,170	487,120
1999	63324	64352	33	637	532	41743	92.69	24	5372810	68,983,895	347,982
2000	53277	65890	84	412	354	48066	102.1	27	5956301	62,874,902	374,758
2001	53779	64880	120	425	217	43750	111.9	32	5372519	60,984,89	367.125
2002	53364	66349	185	444	541	41769	121.9	63	5612773	58,326,741	355,983
2003	55472	78840	150	608	843	48510	129.4	73	5542710	57,227,852	367,983
2004	62175	94304	100	596	213	53218	129.4	22	6472916	55,526,337	271,856
2005	644306	96420	87	670	567	53860	133.5	30	6375161	62,226,035	336,984
2006	66439	97342	40	540	417	58430	132.1	32	5054271	53,931,186	336,915
2007	730621	93549	26	320	474	524448	128.7	28	6852924	38,833,776	335,330
2008	648830	95400	100	212	293	56481	131.4	25	5628492	42,552,843	355,6j54
2009	733258	85639	105	192	279	55329	130.7	20	4652812	37,923,191	334,482
2010	734860	86428	24	172	312	48623	130.3	34	4376129	37,423,735	476,250
2011	785268	85603	18	203	524	64238	155.8	18	4123760	34,626,303	435,892
2012	735887	84359	23	192	674	64580	156.7	25	4456201	26,456,664	383,982
2013	756930	84533	21	200	532	66385	156.7	31	4281900	19,644,380	352,900
2014	734211	91560	21	201	354	69352	157.3	32	4625180	21,756,699	344,626
2015	822309	92449	18	121	217	67556	157.0	43	4092151	22,619,247	222,754

Source: Publications of SPDC, NBS, NNPC for various Years

Note:
GFOB = Fire Outbreaks resulting from Petroleum Tanker Explosion
OPV = Oil Pipeline Vandalism
PROF = Profits
NOS = oil Spill
VOS = Volume of Oil Spills
PRDT = Production Volume
MHL = Man Hour Loss
TNOV –Turnover
EXCR = Exchange rate
IMP = Imports
EXP = Exports

4.1.2: Data presentation for Market Share.

Table 4.1.3 below shows the market share for SPDC. The table is designed to provide solution to research question two in respect of the market share of SPDC. The first column in the table represents the number of years covered by the study which is 1980 – 2015. The second to tenth column indicate the various dependent and independent variables which include Oil Pipeline Vandalism, Oil Revenue for SPDC, Turnover for the period of this study, Exchange rate for the period, balance of payment for the period under review, Import and Export data, Volume of Oil Spill, Number of Oil Spills, and Profit figures of the company.

Table 4.1.3: Stylised facts for Market Share of SPDC
MKTSH = f (OPV, OLREV, TNOR, EXCHR, BOP, IMPt-$_1$, EXPt-$_1$) ----------(i)

Year	OPV	EXCR	TNOV	OLREV	IMP	EXP	BOP	NOS	VOS	PROF
1980	337	0.55	426515	238063	3370	10860	-1.28	241	558	3,538,883
1981	432	0.61	323781	338204	4328	26500	-2.54	238	43	3,342,903
1982	455	0.67	356218	110981	4556	30205	-1.90	257	43	4,155,098
1983	377	0.72	202419	257766	3775	33202	2.43	173	49	3,278,476
1984	356	0.65	218520	115458	3563	46220	1.45	216	10	3,098,346
1985	376	0.89	235616	157734	3763	257802	2.36	151	853	3,463,478
1986	432	2.06	3376508	292752	4320	200730	-2.93	116	553	3,228,210
1987	475	4.02	2433951	308990	4758	148421	0.21	225	31	3,220,987
1988	552	4.54	2667330	271322	5525	227870	-1.65	179	9	3.,874,002
1989	537	7.39	2567405	239709	5374	171075	2.71	211	6	2,983,945
1990	451	8.038	2675546	124170	4516	209062	3.10	180	10	3,122,883
1991	558	9.910	3121408	213033	5580	188045	3.12	252	108	3,124,690
1992	746	17.10	5326148	272001	7460	128860	-1.82	375	55	2,998,367
1993	568	21.89	6838706	160512	5682	167580	2.45	458	6	2,387,091
1994	795	21.89	8998631	107897	7953	173325	-1.84	500	35	2,389,356
1995	882	21.89	1933214	180064	8826	213420	-1.02	420	69	2,376,901
1996	732	21.89	2702719	235922	7328	250062	-2.43	177	42	2,730,339
1997	522	22.89	2801973	230554	5220	214759	2.18	390	59	2,389,012
1998	638	22.89	2708431	188723	6389	207633	-1.88	319	30	2,578,009
1999	527	92.69	3194015	140606	5272	225690	-2-04	637	33	2,223,489
2000	646	102.1	4582127	101552	6460	218560	0.56	412	84	1,873,981
2001	623	111.9	4725086	229334	6230	231759	1.39	425	120	1,723,091
2002	558	121.9	6912381	408908	5585	214378	-2.65	444	185	1,006,514
2003	698	129.4	8487032	610263	6984	237456	-0.64	608	150	1,174,092
2004	637	129.4	11411067	712481	6379	224979	0.64	596	100	1,605,998
2005	1786	133.5	14572232	564944	17861	215490	2.49	670	87	1,591,515
2006	2753	132.1	18564595	648868	27530	236688	2.21	540	40	1,184,271
2007	1937	128.7	20657318	790399	19370	214589	1.45	320	26	1,168,725
2008	1302	131.4	28842171	1105570	13026	224700	-0.54	212	100	1,422,360
2009	662	130.7	22688028	501930	66209	226589	-1,45	192	105	847,752
2010	302	130.3	24062505	494457	30280	228691	1.60	172	24	1,579,473
2011	884	155.8	25197568	1261876	88450	227532	0.09	203	18	2,432,193
2012	884	156.7	34630037	1037463	88408	226008	2.78	192	23	2.194,702
2013	957	156.7	24913802	1060308	95787	223660	0.21	200	21	1,728,965
2014	647	157.3	13688403	1566190	64750	226099	-1.66	201	21	1,570,991
2015	528	157.0	13688403	1481964	52802	230510	-1.44	121	18	1,081,778

Source : Central Bank of Nigeria Statistical Bulletin, NNPC, SPDC,(various issues, National Bureau of Statistics and Annual Financial Statements

NOTE:

MKTSH = Market Share
TNOR = Turnover
EXCR = Exchange rate
OLREV = Oil Revenue
IMPt-1 = Import at a particular Point in time
EXPt-1 = Export at a Particular Point in time
BOP = Balance of Payment

Table 4.1.4 below shows the market share for NAOC. The table is designed to provide solution to research question two in respect of the market share of NAOC. The first column in the table represents the number of years covered by the study which is 1980 – 2015. The second to tenth column indicate the various dependent and independent variables which include Oil Pipeline Vandalism, Oil Revenue for SPDC, Turnover for the period of this study, Exchange rate for the period, balance of payment for the period under review, Import and Export data, Volume of Oil Spill, Number of Oil Spills, and Profit figures of the company.

Table 4.1.4: Stylised facts for Market Share of NAOC
MKTSH = f (OPV, OLREV, TNOR, EXCHR, BOP, IMPt-$_1$, EXPt-$_1$) ----------(i)

Year	OPV	EXCR	TNOV	OLREV	IMP	EXP	BOP	NOS	VOS	PROF
1980	337	0.55	426515	36529	24790	10860	-1.28	241	558	772,998
1981	432	0.61	323781	25719	26392	26500	-2.54	238	43	692,340
1982	455	0.67	356218	20752	34521	30205	-1.90	257	43	662,955
1983	377	0.72	202419	17640	30147	33202	2.43	173	49	637,992
1984	356	0.65	218520	13659	32569	46220	1.45	216	10	587,984
1985	376	0.89	235616	23587	34586	257802	2.36	151	853	521,983
1986	432	2.06	3376508	24609	52740	200730	-2.93	116	553	562,983
1987	475	4.02	2433951	36976	53751	148421	0.21	225	31	476,983
1988	552	4.54	2667330	36594	52332	227870	-1.65	179	9	442674
1989	537	7.39	2567405	26567	52780	171075	2.71	211	6	466837
1990	451	8.038	2675546	87405	53164	209062	3.10	180	10	423,941
1991	558	9.910	3121408	107750	52273	188045	3.12	252	108	465,779
1992	746	17.10	5326148	142776	53280	128860	-1.82	375	55	380,348
1993	568	21.89	6838706	183530	55639	167580	2.45	458	6	349,973
1994	795	21.89	8998631	270684	48318	173325	-1.84	500	35	238,178
1995	882	21.89	1933214	428965	47221	213420	-1.02	420	69	437,873
1996	732	21.89	2702719	587254	62801	250062	-2.43	177	42	332,287
1997	522	22.89	2801973	676744	63328	214759	2.18	390	59	472,873
1998	638	22.89	2708431	786805	62485	207633	-1.88	319	30	487,120
1999	527	92.69	3194015	860947	63324	225690	-2-04	637	33	347,982
2000	646	102.1	4582127	937884	53277	218560	0.56	412	84	374,758
2001	623	111.9	4725086	1055219	53779	231759	1.39	425	120	367.125
2002	558	121.9	6912381	1274867	53364	214378	-2.65	444	185	355,983
2003	698	129.4	8487032	1780448	55472	237456	-0.64	608	150	367,983
2004	637	129.4	11411067	1900865	62175	224979	0.64	596	100	271,856
2005	1786	133.5	14572232	1996974	644306	215490	2.49	670	87	336,984
2006	2753	132.1	18564595	2253389	66439	236688	2.21	540	40	336,915
2007	1937	128.7	20657318	3859749	730621	214589	1.45	320	26	335,330
2008	1302	131.4	28842171	5439910	648830	224700	-0.54	212	100	355,6j54
2009	662	130.7	22688028	4604458	733258	226589	-1,45	192	105	334,482
2010	302	130.3	24062505	4639202	734860	228691	1.60	172	24	476,250
2011	884	155.8	25197568	4749617	785268	227532	0.09	203	18	435,892
2012	884	156.7	34630037	5484925	735887	226008	2.78	192	23	383,982
2013	957	156.7	24913802	6253986	756930	223660	0.21	200	21	352,900
2014	647	157.3	13688403	6899496	734211	226099	-1.66	201	21	344,626
2015	528	157.0	13688403	7415203	822309	230510	-1.44	121	18	222,754

Source : Central Bank of Nigeria Statistical Bulletin, NNPC, NAOC,(various issues, National Bureau of Statistics and Annual Financial Statements

NOTE:

MKTSH = Market Share
TNOR = Turnover
EXCR = Exchange rate
OLREV = Oil Revenue
IMPt-1 = Import at a particular Point in time
EXPt-1 = Export at a Particular Point in time
BOP = Balance of Payment

Table 4.1.5 Disaggregated Data for Profitability of SPDC

Year	IMP	VOS	NOS	GFOB	OPV	EXPT	EXCR	MHL	TNOV	PDTN	PROF
										Barrels	N 000, 000
1980	3370	558	241	20	337	10860	0.55	22457	426515	567.017,922	3,538,883
1985	3763	853	151	17	376	257802	0.89	59440	235616	465.492,910	3,463,478
1990	4516	10	180	80	451	209062	8.038	35280	2675546	528,991,367	3,122,883
1995	8826	69	420	73	882	213420	21.89	216708	1933214	563,882,985	2,376,901
2000	6460	84	412	20	646	218560	102.1	232210	4582127	372,553,880	1,873,981
2005	17861	87	670	18	1786	215490	133.5	246262	14572232	294,996,169	1,591,515
2010	30280	24	172	23	302	228691	130.3	522690	24062505	137,681473	1,579,473
2015	52802	18	121	76	528	230510	157.0	721148	13688403	109,745,940	1,081,778

Source: Publications of SPDC, NBS, CBN, NNPC for various Years

Table 4.1.5 shows a relatively steady increase in Oil Pipeline vandalism from 1980 until 2010 when there was a sharp drop. Furthermore Man Hour Loss steadily increased throughout the thirty five year period of analysis. Furthermore, production and profitability steadily decreased from 1980 to 2015. Analytically, Man Hour Loss, Oil Spill, and Oil Pipeline vandalism marginally increased and have a significant effect on the Production and profitability values of SPDC marginally decreased.

Table 4.1.6 Disaggregated Data for Profitability of NAOC

Year	IMP	MHL	VOS	NOS	OPV	EXPT	EXCR	GFOB	TNOV	PDTN	PROF
										Barrels	N 000, 000
1980	24790	56201	558	241	293	23510	0.55	10	2379027	92,396,602	772,998
1985	34586	65430	853	151	532	28054	0.89	20	3266130	80,000,708	521,983
1990	53164	54830	10	180	213	35129	8.038	32	3134628	85,776,653	423,941
1995	47221	59730	69	420	279	43558	21.89	22	4648310	73,376,980	437,873
2000	53277	65890	84	412	354	48066	102.1	27	5956301	62,874,902	374,758
2005	644306	96420	87	670	567	53860	133.5	30	6375161	62,226,035	336,984
2010	734860	86428	24	172	312	48623	130.3	34	4376129	37,423,735	476,250
2015	822309	92449	18	121	217	67556	157.0	43	4092151	22,619,247	222,754

Source: Publications of NAOC, NBS, CBN, NNPC for various Years

The disaggregated table 4.1.6 above shows that fire Outbreaks steadily increased throughout the period of study. Also, Oil Pipeline vandalism and oil spills steadily

increased from 1980 to 2010 when there was a sharp decline. On the other hand, production and Profits steadily decreased throughout the period of study showing that these dependent variables were impacted upon by the independent variables.

Table 4.1.7 Disaggregated Data for Market Share of SPDC

Year	OPV	EXCR	TNOV	OLREV	IMP	EXP	BOP	NOS	VOS	PROF
										Barrels
1980	337	0.55	426515	238063	3370	10860	-1.28	241	558	567.017,922
1985	376	0.89	235616	157734	3763	257802	2.36	151	853	465.492,910
1990	451	8.038	2675546	124170	4516	209062	3.10	180	10	528,991,367
1995	882	21.89	1933214	180064	8826	213420	-1.02	420	69	563,882,985
2000	646	102.1	4582127	481552	6460	218560	0.56	412	84	372,553,880
2005	1786	133.5	14572232	564948	17861	215490	2.49	670	87	294,996,169
2010	302	130.3	24062505	474457	30280	228691	1.60	172	24	137,681473
2015	528	157.0	13688403	481964	52802	230510	-1.44	121	18	109,745,940

Source: Publications of SPDC, NBS, CBN, NNPC for various Years

Table 4.1.7 shows a relatively steady increase in Turnover from 1980 until 2015. Furthermore Volume of oil Spills steadily decreased throughout the thirty five year period of analysis, while OPV marginally increased between 1980 and 2005, before a sharp drop in 2010.

Table 4.1.8 Disaggregated Data for Market Share of NAOC

Year	OPV	EXCR	TNOV	OLREV	IMP	EXP	BOP	NOS	VOS	PROF
										Barrels
1980	337	0.55	426515	36529	24790	10860	-1.28	241	558	772,998
1985	376	0.89	235616	23587	34586	257802	2.36	151	853	521,983
1990	451	8.038	2675546	87405	53164	209062	3.10	180	10	423,941
1995	882	21.89	1933214	428965	47221	213420	-1.02	420	69	437,873
2000	646	102.1	4582127	937884	53277	218560	0.56	412	84	374,758
2005	1786	133.5	14572232	1996974	644306	215490	2.49	670	87	336,984
2010	302	130.3	24062505	4639202	734860	228691	1.60	172	24	476,250
2015	528	157.0	13688403	7415203	822309	230510	-1.44	121	18	222,754

Source: Publications of SPDC, NBS, CBN, NNPC for various Years

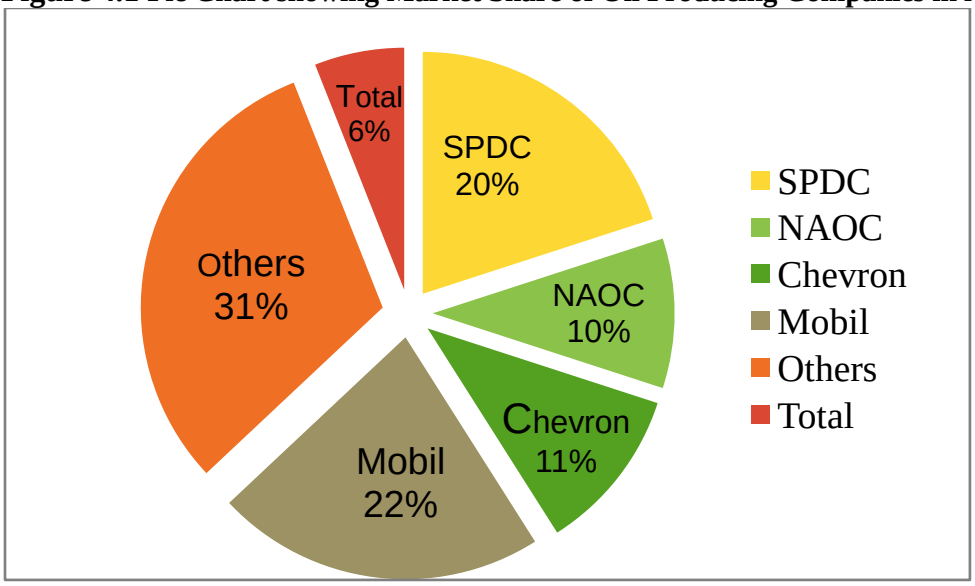
Table 4.1.8 shows a relatively steady increase in Turnover from 1980 until 2015. The Volume of oil Spills steadily decreased throughout the thirty five year period of analysis, while OPV marginally increased between 1980 to 2005, before a sharp drop in 2010.

Table 4.1.9. Table Showing the Percentage Market Share of Oil Producing Companies in Nigeria

Oil Company	% of Petroleum Product Market Share
SPDC	20
NAOC	10
Chevron	11
Mobil	22
Others	31
Total	6

Source: NNPC Annual Statistical Bulletin.

Figure 4.1 Pie Chart showing Market Share of Oil Producing Companies in Nigeria



Source: NNPC Annual Statistical Bulletin 2015.

Table 4.1.9 and Figure 4.1 are table and pie chart respectively which show the market share of the studied companies (SPDC and NAOC) as compared to other major oil companies in Nigeria. SPDC has the second largest market behind Mobil (Mobil Producing Nigeria Unlimited) while NAOC comes 4th among the listed companies. The largest market share is jointly controlled by more than twenty five other minor players in the oil producing market.

4.2. Descriptive Statistics

Description of Respondents' Profile In Respect of Objectives 3 & 4

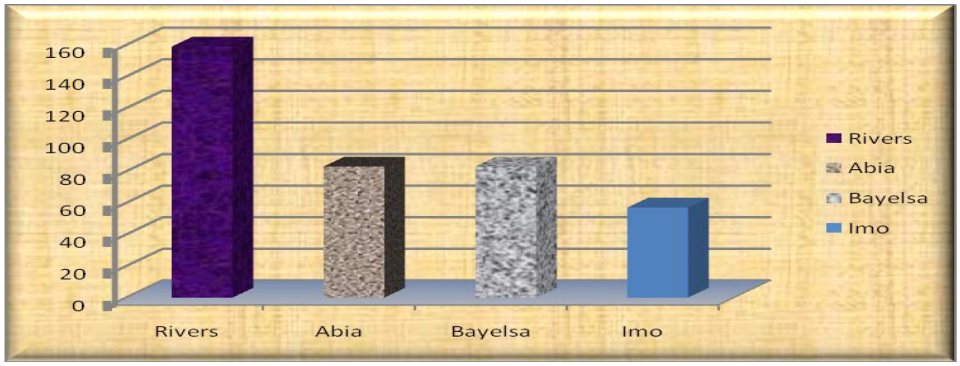
Table 4.2.1: Distribution of Respondents' State

S/N	States	Frequency	Percent (%)
1	Rivers	159	41.6
2	Abia	83	21.7
3	Bayelsa	83	21.7
4	Imo	57	14.9
	Total	**382**	**100.0**

Source: Researcher's computation using SPSS version-21

Table 4.2.1 and Figure 4.2 depict the distribution of respondents' states that are adopted for the study 41.6%, 21.7%, 21.7% and 14.9% of the respondents are Rivers, Abia, Bayelsa, and Imo Sate indigenes respectively. That is, one hundred and fifty-nine (159), eighty-three (83), eighty-three (83) and fifty-seven (57) for Rivers, Abia, Bayelsa and Imo respectively. Figure 4.2 also gives the graphic depiction of respondents' states distribution. Rivers state has highest number of respondents followed by Abia, and Bayelsa states. Imo state had lowest bar-chart.

Figure 4.2. ***Bar-chart representation of respondents' state distribution***



Source: Field Survey 2017 (**Researcher's design)**

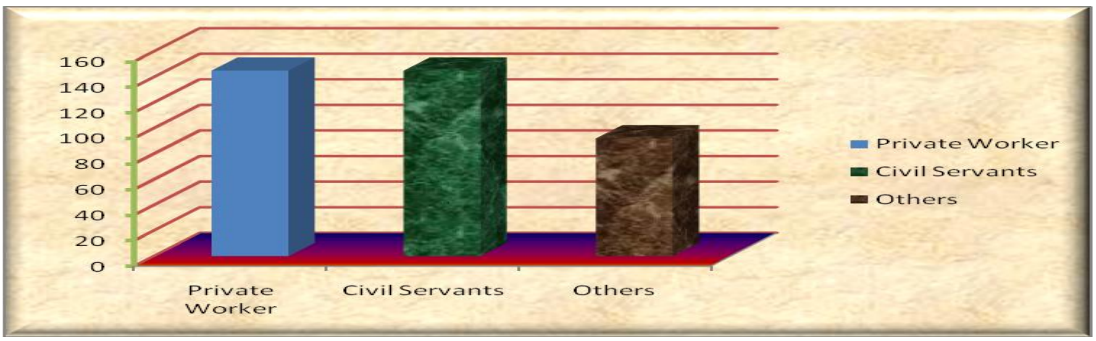
Table 4.2.2: ***Distribution of Respondents' Occupations.***

S/N	Respondents' Occupations	Frequency	Percent (%)
1	Private Worker	145	38.0
2	Civil Servants	145	38.0
3	Others	92	24.1
	Total	**382**	**100.0**

Source: Researcher's computation using SPSS version-21

Table 4.2.2 and Figure 4.3 portray the distribution of respondents' occupation that are used for the study 38%, 38% and 24.1% of the respondents are private workers, civil servants and others respectively. That is, one hundred and forty-five (145), one hundred and forty-five (145), and ninety-two (92) for private workers, civil servants and others respectively. The figure 4.3 also gives the graphic illustration of occupation distribution. Private workers and civil servants have equal bar-chart and others (i.e farmers, traders etc.) had the lowest bar-chart.

Figure 4.3: ***Bar-chart representation of Respondents' Occupations.***



Source: Field Survey 2017 (**Researcher's design).**

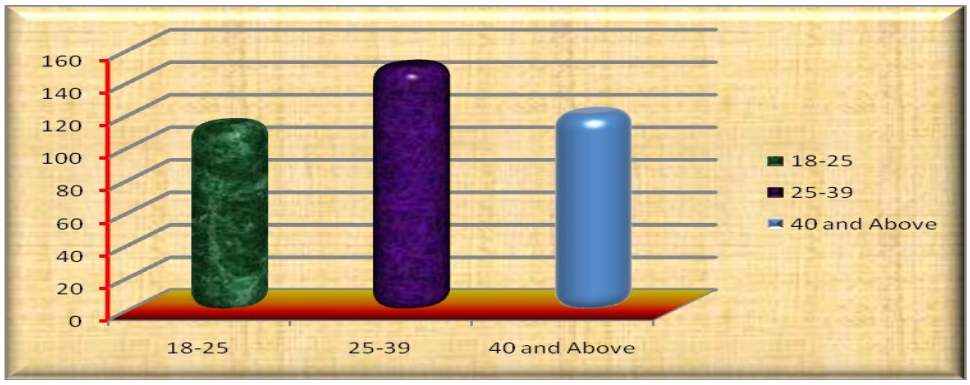
Table 4.2.3: Distribution of Respondents' Age

S/N	Respondents' Age	Frequency	Percent (%)
1	18-25	113	29.6
2	25-39	149	39.0
3	40 and Above	120	31.4
	Total	**382**	**100.0**

Source: Researcher's computation using SPSS version-21

Table 4..2.3 and Figure 4.4 show respondents' age distribution that are adopted for the study 29.6%, 39% and 31.4% of the respondents are within the age brackets of 18-25, 25-39 and 40-above respectively. That is, one hundred and thirteen (113), one hundred and forty-nine (149), and hundred and twenty (120) for age bracket of 18-25, 25-39, 40-above respectively. The figure 4.4 shows that 25-39 years had the highest rectangular bar followed by 40 years and above while 18-25years age bracket had the least.

Figure 4.4: ***Bar-chart representation of respondents' age***



Source: Field Survey 2017 (**Researcher's design).**

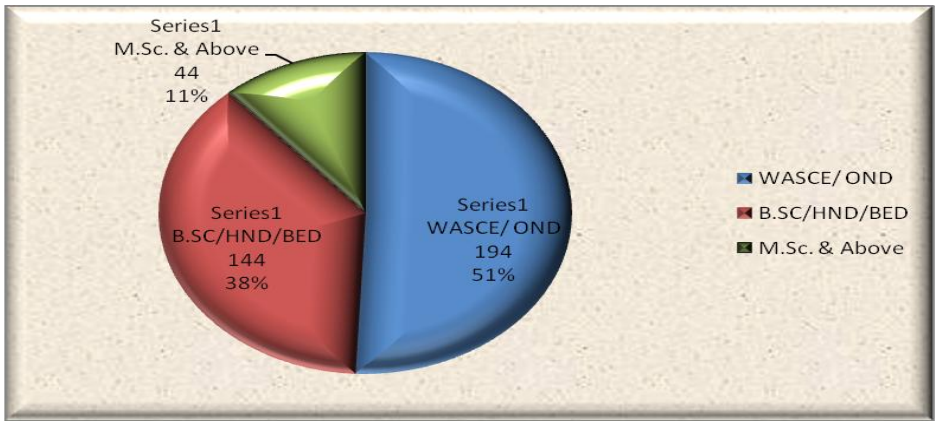
Table 4.2.4: ***Distribution of Respondents' Educational Qualification***

S/N	Educational Qualification	Frequency	Percent (%)
1	WASCE/ OND	194	50.8
2	B.SC/HND/BED	144	37.7
3	M.Sc. & Above	44	11.5
	Total	**382**	**100.0**

Source: Field Survey 2017 (**Researcher's design).**

Table 4.2.4 and Figure 4.5 show the distribution of respondents' educational qualification 50.8% for WASCE/OND, 37.7% for B.Sc./HND/BED and 11.5% for M.Sc. and above, with their corresponding frequency one hundred and ninety-four (194), one hundred and forty-four (144), and forty-four (44) respectively. The figure 4.5 illustrates educational qualification distribution of respondents; WASCE/OND had the highest pie followed by B.Sc./HND/BED while M.Sc. and Above 44 years had the smallest pie.

Figure 4.5: ***Pie-chart representation of Respondents' Educational Qualification***



Source: Field Survey 2017 (**Researcher's design).**

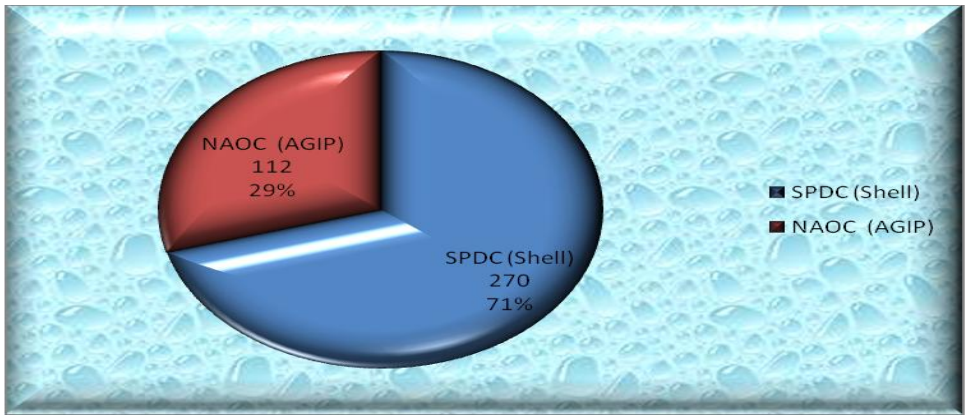
Table 4.2.5: ***Distribution of Oil Companies***

S/N	Oil Companies	Frequency	Percent (%)
1	SPDC (Shell)	270	70.7
2	NAOC (AGIP)	112	29.3
	Total	**382**	**100.0**

Source: Field Survey 2016 (**Researcher's design).**

Table 4.2.5 and figure 4.6 shows that of the two companies studied, SPDC (Shell) operates in 70.7% of the Niger Delta area and it has the larger share of pie-chart while NAOC (AGIP) operates in 29.3% of the area and it has the smaller portion of the pie-chart.

Figure 4.6: ***Pie-Chart Representation of Companies Distribution***



Source: Field Survey 2017 (**Researcher's design).**

4.3: Presentation of Results

The Results of the multiple regression Model specified in the previous chapter is here presented. It contains dependent and independent variables as well as unknown parameters which is estimated. The Ordinary Least Square Regression approach is here used. The following are the output of the model.

Presentation of results for Objective 1

Table 4.3.1: Multiple Regression Analysis Showing the effect of Grievance management on the Profitability of SPDC.

Method of Estimation – Ordinary Least Square

Independent Variable: Grievance Management

Dependent Variable: Profitability

Current Sample: 1980-2015

Number of Observations 35

Sum of squared Residuals =6979.06 Variance of Residuals = 268.425

Std. Error of Regression =16.2837 R^2 = .4678847 accepted

Adjusted R squared = .762156 Mean of dep. Var. =20.8719

Adjusted R squared = .762156 LM het = 054878[.815]

Durbin Watson =2.37131[.001.214] Jarque Bera Test =25.5023[.000]

Ramsey's RESET2 .052905[.020] F Zero slopes) =2.19994[.085]

Schwartz B.I.C =141.962 Std. Dev. = 17.8991

Log Likelihood = -131.565 R = 0.684021.

	Estimated Coefficient	Standard Error	T-statistic	P-Value
C	23.7275	63.41463	.532788	[.599]
L IMP_{t-1}	-2.90529	5.18621	-2.560195	[.580]
L VOS	-.017767	1.63076	-.410895	[0000]
L OPV	-.26.7345	2.65100	-3.52310	[0000]
L NOS	-.38.2110	1.76219	-1.75290	[0000]
L GFOB	7.61360	3.40986	2.23282	[.034]
L TNOVR	4.41250	1.8925	2.41281	[0.002]
L PDT	-3.81634	3.28324	1.98372	[0,005]
L PROF	.018956	2.19642	2.46111	[0,000]
L EXP_{t-1}	.54903	.947989	-2.057916	[.954]
L EXCR	1.41947	3.19415	.444397	[.660]
LMHL	4.18640	1.75929	2.65405	[0.002]
L	0.72	.856565	0.86461	[0.010]

Source: Gret L. Package 2016

Table 4.3.2: Multiple Regression Analysis Showing the effect of Grievance management on the Profitability of NAOC.

Method of Estimation – Ordinary Least Square

Independent Variable: Grievance Management

Dependent Variable: Profitability

Current Sample: 1980-2015

Number of Observations 35

Sum of squared Residuals =6433.78 Variance of Residuals = 405.425

Std. Error of Regression =16.6607 Adjusted R squared = .081760

Mean of dep. Var. =20.8719 Std. Dev. = 18.8704

R^2 = .543305 LM het Test = .2054192[.650]

Durbin Watson =1.22296[.001] Jarque Bera Test =16.0393[.000]

Ramsey's RESET2 .14485[.201] F Zero slopes) =1.35604[.341]

Schwartz B.I.C =156.16 Log Likelihood = -143.565

	Estimated Coefficient	Standard Error	T-statistic	P-Value
C	32.6896	65.47665	.642788	[.599]
L IMP_{t-1}	-3.62806	4.17530	-2.458058	[.580]
L VOS	-.037281	1.53420	-.4954219	[0000]
L OPV	-.23.5482	2.58003	-4.75316	[0000]
L NOS	-.38.2110	1.76219	-1.63893	[0000]
L GFOB	6.84290	4.42086	3.86350	[.044]
L TNOVR	6.83405	2.64801	2.53293	[0.003]
L PDT	-4.66539	5.73210	2.85321	[0,006]
L PROF	.026980	3.24390	2.68554	[0,000]
L $EXPT_{t-1}$	.47590	.754801	-4.053281	[.682]
L EXCR	1.54862	3.52830	.484652	[.660]
LMHL	4.58026	1.58421	2.79849	[0.001]
L	0.62	.763278	0.68437	[0.010]

Source: Gret L. Package 2016

Presentation of results for Objective 2

Presented below is the regression analysis showing the implication of grievance management on market share. Details of the data used in these computations are shown in the ordinary Least Square Regression approach. The following are the output of the model.

Table 4:3.3. ***Regression Analysis Showing*** **the implication of grievance management on market share for SPDC.**

Independent variable: Grievance management

Dependent variable: Mkt. Share

Current Sample: 1980-2015

Number of Observations: 35

Mean of dep. Var. 11414.609 Jarque-Bera test = 14,26060 [

Sum of squared residuals = 7.45845 Std. dev. Of dep. Var =2.21737

Std error of regression = .152128 Variance of residuals = 565696

Adjusted r-squared = .617865 R-squared = .899791

Durbin-Watson Ramsey's RESET2 = .293879 [.592] f(Zero slopes) = 60.609 [.001]

Schwarz B.I.C = 42.2368 Log likelihood = .33.5725

R = 0.787 R^2= 0.620

VARIABLES	ESTIMATED COEFFICIENT	STANDARD ERROR	T-STATISTICS	P-VALUE
ΔC	29.436	1.6025	18.3800	[.000]
ΔLOPV	-.10643	.00423	-24.6700	[.000]
ΔLNOS	-.71320	1.1317	-.5.4472	[.000]
ΔLVOS	-.6742	.14223	-.4.7390	[.000]

Source: Gret L. Package 2017

Table 4:3.4. ***Regression Analysis Showing*** **the implication of grievance management on market share for NAOC.**

Independent variable: Grievance management

Dependent = 2.15973 LM het. Test = .899791

variable: Mkt. Share

Current Sample: 1980-2015

Number of Observations: 35

Mean dep. Variance 13741.55138

Jarque-Bera test = 12.60401[.272]

Sum of squared residuals = 13.3457 Std. dev. Of dep. Var =1.64374

Std error of regression = .716447 Variance of residuals = 565696

Adjusted r-squared = .810023 R-squared = .840664

Durbin-Watson = 1.11649[.000,.045] LM het. Test = .899791

Ramsey's RESET2 = .62300[.527] f(Zero slopes) =68.609 [.001]

Schwarz B.I.C = 41.8106 Log likelihood = -31.8106

R = 0.864 R^2= 0.760

VARIABLES	ESTIMATED COEFFICIENT	STANDARD ERROR	T-STATISTICS	P-VALUE
ΔC	34.218	1.8265	16.5200	[.000]
ΔLOPV	-.20638	.00462	-38.3700	[.000]
ΔLNOS	-.48650	2.3870	-.7.5201	[.000]
ΔLVOS	-.4719	.3598	-.7.4920	[.000]

Source: Gret L. Package (2017)

Presentation of results for Objective 3

Statistics showing the effect of oil spill on the economic development of host communities in Nigeria.

The details of the data used in these computations are presented in Appendix 2 of this work.

Table 4:3.5: Test of Hypothesis 3: Summary of Data Derived from Appendix 2.

No	X	Y	XY	X^2	Y^2
382	3475	13395	119263	35091	484550

Source: Field survey, 2017.

Presentation of results for Objective 4

Statistics showing the extent to which pipeline vandalism inhibit sustainable community development of host communities in Nigeria.

Details of the data used in these computations are presented in Appendix 3 of this work.

Table 4:3.6: Test of Hypothesis 4: Summary of Data Derived from Appendix 3.

No	X	Y	XY	X^2	Y^2
382	3492	13311	118634	35674	475809

Source: Field survey, 2017

CHAPTER FIVE
DISCUSSION OF FINDINGS,

5.1 . Effect of grievance management on the Profitability of Oil Producing Companies in the Niger Delta region of Nigeria from 1980-2015.

Tables 4.1.1, 4.1.2, 4.1.3, and 4.1.4, as well as 4.3.1, and 4.3.2, show the result of the estimated coefficients of grievance management on profitability of oil producing companies in Niger Delta region of Nigeria. The results showed that oil spills, oil pipeline vandalism and volume of oil spills are statistically significant ($P<0.05$) at 5% level and therefore, provided a strong reason for the rejection of the null hypothesis that there is no significant effect of grievance management on the Profitability of selected Oil Producing Companies in the Niger Delta region of Nigeria from 1980-2015.

A close glimpse on the results indicates that those explanatory variables have negative signs on the estimated coefficients. The implication of the aforementioned explains that any unit increase on each of grievance management measuring variables result to significant decrease on the profitability of these firms and vice versa. R^2 is 0.47, which implies that 47% variations in the profitability level of these firms are caused by the grievance management variables in the Niger Delta Region of Nigeria. The computed DW is 2.37131, at 5% level of significance with three explanatory variables along with 35 observations, the tabulated DW for dL and du are 1.758 and 1.778, respectively. Therefore, the value of DW is succinctly lower than the lower limit of DW. Hence, there is no evidence of positive first order serial correlation on the stated model.

The computed DW is 2.37131, at 5% level of significance with three explanatory variables along with 35 observations, the tabulated DW for dL and du are 1.758 and 1.778, respectively. This result dove-tailed the annual report of the Nigerian Extractive Industry Transparency Initiative (2013) that explicitly showed detail of 10.9 billion US Dollars profit loss from oil pipeline vandalism in the Niger Delta region of Nigeria. Therefore, issues relating the problems of grievance management have significant effect on the profitability of oil producing companies which invariably affects their total

performance. In Table 4.1.5 and 4.1.6, Man Hour Loss steadily increased throughout the thirty five year period of analysis. Furthermore, production and profitability steadily decreased from 1980 to 2015. Analytically, while Man Hour Loss, Oil Spills, and Oil Pipeline vandalism marginally increased and have a significant effect on the Production and profitability values of SPDC marginally decreased.

. It can be argued that if the value of oil pipeline vandalism product loss drops, there would be an inverse effect on the profitability of the firms. This observation positively correlates with the finding here that grievance affects the profitability of oil producing companies. Grievance when not seated translates into conflict in host communities which disrupt company profitability and leads to loss of man-hours. This finding in Hypothesis 1, also agrees with the findings by the United States Energy Information Administration (EIA, 2015) that oil theft, commonly referred to as "bunkering," leads to pipeline damage that is often severe, causing loss of production, pollution, and forcing companies to shut down production in the Niger Delta. In simple language, oil pipeline vandalism which is a proxy for grievance management leads to low profitability (performance) of oil companies in Nigeria. It is therefore established that poor management of grievances by oil producing Companies leads to variations in the profitability of the oil producing companies..

5.1.1. Test of Hypothesis 1

The Hypothesis presented in Objective I of the first Chapter of this study is here tested using F-statistics. From the regression analysis in Tables 4.1.1, 4.1.2, 4.1.3, and 4.1.4, as well as table 4.3.1, and 4.3.2, the results showed that at 5 percent level of interval, there is a significant effect of grievance management on profitability.. R^2 is 0.47 for SPDC and 0.54 for NAOC which implies that 47% and 54 per cent of the variations on the profitability of SPDC and NAOC are caused by the grievance management variables in the Niger Delta Region of Nigeria.. The estimated coefficient of the explanatory grievance management variables have negative signs on the profitability of these firms and are statistically significant as affirmed at t-probability (0.000) at 5% level of

significance. The implication of the result is that increase in oil pipeline vandalism results to a significant decrease in the profitability of SPDC by 27% significantly. In addition, continuous oil spills in the Niger Delta Region of Nigeria contribute significantly to a decrease in company profitability by 38%. More so, an increase in the volume of oil spill in the region brings about a significant decrease of 18% in the profitability of these firms.

5.2, Implication of grievance management on the market leadership (market share) of selected Oil Producing Companies in the Niger Delta region

Table 4:3.3, 4.3.4 show that all the explanatory variables (oil pipeline vandalism, Number of oil spill and volume of oil spill) as proxied variable of grievance management are significant ($P<0.05$) at 5% level of significance and therefore, the study rejects the null hypothesis that there is no significant implication of grievance management on the market leadership (market share) of selected Oil Producing Companies in the Niger Delta region of Nigeria from 1980-2015

The results on the estimated coefficients show that all the explanatory variables have negative signs and are statistically significant at 5% level. This implies that any unit increase on each of the explanatory variables will bring about a decrease on market share of selected petroleum companies in Niger Delta Region of Nigeria. Specifically, any unit increase on the oil pipeline vandalism, holding other variables constant, will contribute substantially to the decrease of their market share by 11% significantly. In the same vein, any increase on the Number oil spill in the Niger Delta will bring about a significant decrease of 71% of their market share while increase on the volume of oil spill in the area will bring about a significant decrease of 67% of their market share. The R^2 of 0.620 implies that 62% variations on their market share is caused by grievance management in the Niger Delta.

5.4.1. Test of Hypothesis 2.

The result of hypothesis four showed that there is a significant implication of grievance management on market leadership (market share) of selected oil producing companies in the Niger Delta. This was shown by the R= 0.787. The estimated coefficient of the

explanatory variables of oil pipeline vandalism, number of oil spills and volume of oil spills have negative signs on the market leadership of these firms and are statistically significant as affirmed at t-probability (0.000) at 5% level of significance. The implication of the result is that increase in oil pipeline vandalism results to a significant decrease on the market share of these firms by 11% significantly. In addition, continuous oil spills in the Niger Delta Region of Nigeria contribute significantly to a decrease in their market share by 71%. More so, an increase on the volume of oil spill in the region brings about substantive decrease by 64% significantly on the market share of these firms. This finding is similar to that by Babatunde (2011) who found that grievance in the region gave vent to pipeline vandalism, oil theft etc. and it has significant implications on the performance of oil companies in the Niger Delta region of Nigeria.

5.3. Effect of oil spill on the economic development of host communities in the Niger Delta, Nigeria.

Table 4.3.5 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 3. Details of the data used in these computations are presented in the Appendix 2 of this work.

From Table 4.3.5 above, number of respondents = 382, $\sum X = 3475$, $\sum Y = 13395$, $\sum XY = 119263$, $\sum X^2 = 35091$ and $\sum Y^2 = 484550$.

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{(n\sum X^2 - (\sum X)^2\ (n\sum Y^2 - (\sum Y)^2}}$$

$$r = \frac{382 \times 119263 - 3475 \times 13395}{\sqrt{[(382 \times 35091 - 12075625)][(382 \times 484550 - 179426025)]}}$$

$$r = \frac{45558466 - 46547625}{\sqrt{1329137 \times 5672075}}$$

$$r = \frac{-989159}{\sqrt{7538964749}}$$

$$r = \frac{-989159}{1868272.13}$$

$r = -0.53$

Coefficient of determination $(r^2) = 0.28$

Computation of t_c value:

$$t_c = r\frac{\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$t_c = \frac{-0.53\sqrt{382-2}}{\sqrt{1-0.28}}$$

$$t_c = \frac{-0.53(19.49)}{0.84}$$

$t_c = -12.29$

For hypothesis 2: $r = -0.53$, $r^2 = 0.28$ and $t_c = -12.29$

5.2.1. Test of Hypothesis 3

At 5% level of significance, the calculated t-value of -12.29 is less than the critical t-value of -1.96, so the study rejects the null hypothesis that there is no significant effect of oil spills on the economic development of host communities in the Niger Delta, Nigeria and accept the alternate. Oil spillage has a significant effect on the level of economic development amongst the host communities in the Niger Delta. This implies

that oil spillage has a significant negative relationship with the level of economic development in the host communities in the Niger Delta Region of Nigeria.

The result on hypothesis two shows that there is a significant effect of oil spills on the economic development of host communities in the Niger Delta Region of Nigeria. At 5% level of significance, the calculated t-value of -12.29 is less than the critical t-value of -1.96, so the study rejects the null hypothesis that there is no significant effect of oil spill on the economic development of host communities in Nigeria and accepts the alternate that there is a significant effect of oil spill on the economic development of host communities in the Niger Delta region of Nigeria.

Results also shows that the extent of variations on the level of economic development in the area as caused by the rise in number of oil spill in the Niger Delta Region of Nigeria. The result also showed the t-calculated as -12.29 which is lesser than the tabulated t-value of -1.96, and therefore provided a strong basis for the rejection of the null hypothesis and acceptance of its alternate. This finding is relative to the earlier findings of Eluka, Chukwu and Mba (2013) who investigated the effect of issues relating to oil spill in the area and its implications on the economic development of the people. Eluka et al (2013) found that consistent oil spillage affects the community development in the area.

5.4. Extent to which pipeline vandalism inhibit sustainable community development of host communities in Nigeria.

Table 4.3.6 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 4. Details of the data used in these computations are presented in the Appendix 3 of this work. From Table 43.6, number of respondents n= 382, $\sum X = 3492$, $\sum Y = 13311$, $\sum XY = 118634$, $\sum X^2 = 35674$ and $\sum Y^2 = 475809$.

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{(n\sum X^2 - (\sum X)^2 \ (n\sum Y^2 - (\sum Y)^2}}$$

$$r = \frac{382 \times 118634 - 3492 \times 13311}{\sqrt{[(382 \times 35674 - 12194064)][(382 \times 475809 - 177182721)]}}$$

$$r = \frac{45318188 - 46482012}{\sqrt{1433404 \times 4576317}}$$

$$r = \frac{-1163824}{80992043.34}$$

$$r = -0.14$$

Coefficient of determination (r^2) = 0.20

Computation of t_c value:

$$t_c = r \frac{\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$t_c = \frac{-0.14\sqrt{382-2}}{\sqrt{1-0.20}}$$

$$t_c = \frac{-0.14\ (19.49)}{0.8}$$

$$t_c = -3.41$$

For hypothesis 3: r = -0.14, r^2 = 0.20 and t_c = -3.41

5.4.1. Test of Hypothesis 4.

Oil pipeline vandalism does not significantly inhibit sustainable community development of host communities in Niger Delta Region of Nigeria.

At 5% level of significance, the calculated t-value of -3.41 is less than the critical t-value of -1.96, so the study rejects the null hypothesis that Pipeline vandalism does not significantly inhibit sustainable community development of host communities in Niger Delta Region of Nigeria

Pipeline vandalism significantly inhibits the level of sustainable development of host communities in the Niger Delta Region of Nigeria. The implication of the result is that any unit increase on the rate of oil pipeline vandalism contributes to the decrease on the level of sustainable development on the host communities by 20% significantly.
The result on hypothesis three shows that Oil pipeline vandalism significantly effects the level of sustainable development of host communities in the Niger Delta Region of Nigeria. The implication of the result is that any unit increase on the rate of oil pipeline vandalism contributes significantly to the decrease in the level of sustainable development on the host communities by 20%.

This relationship was also shown by correlation coefficient of r = -0.14. The implication of the negative sign implies that any increase on the oil pipeline vandalism brings about a significant reduction on the level of sustainable community development of the host communities in the area. This negative sign points to the fact that oil pipeline vandalism hampers the level of community development. The R^2 is 0.20. This shows the extent variations on the level of community development in the area as caused by oil pipeline vandalism in the Niger Delta Region of Nigeria. The result also showed the t-calculated as -3.41 which is lesser than the tabulated t-value of -1.96, and therefore provided a strong basis for the rejection of the null hypothesis and acceptance of its alternate. This finding is in line with the findings of IPIECA (2012) who discovered that incessant cases of oil pipeline vandalism have militated against meaningful community development amongst the host communities in the Niger Delta Region of Nigeria.

5.5 Discussion of Descriptive Statistics Results,

The descriptive statistics in table 4.2.2 indicates that most of the participants in the selected host communities are either private workers who serve in the oil exploration companies, artisans, or businessmen, and civil servants in government establishments. These categories constitute 76 per cent of the respondents. This goes to show that the participants are mostly employed and are thus adjudged responsible and able to give unbiased responses to the questionnaire instrument.

Table 4.2.5 shows the distribution of the two oil producing companies in the four states in which this survey was done. 70.7 percent of the participants indicate that SPDC is the dominant offshore operator in the investigated communities leaving the remaining 29.3 percent to NAOC.

Table 4.2.3 shows that 70.4 percent of the respondents are within the higher working age bracket of 25 and above. Of this population, 39.0 percent are within the ages of 25 – 39 years while 31.4 percent are within the age brackets of 40 years and above. This indicates that the participants in the survey are of the active working age and therefore fit for the survey.

Table 4.2.4 shows that 88.5 percent of the survey participants have had some reasonable level of literacy ranging from the West African School Certificate Examinations (WASCE) to the University or Polytechnic degree. 50.8 percent of the participants are WASCE or the Ordinary Level Diploma holders while 37.7 percent are Degree or Higher national diploma holders. This could show that the survey participants have sufficient literacy to objectively appreciate the survey instruments and to give adequate attention to the questionnaire items.

Table 2.10 and Figure 2.2 indicate the variations in three grievance management explanatory variables namely oil spill, volume of oil spills and pipeline vandalism for the thirty five year period of this study, and the performance explanatory variable of volume of crude oil production for the same thirty five year period spanning 1985 to 2015.

Figure 2.2 also shows that there is a marginal increase in oil spills especially between the year 1980 - 2005. Also there is a marginal increase in oil pipeline vandalism between the year 2000 – 2010. The statistics for volume of oil spills and pipeline

vandalism shows similar and repeated fluctuations especially between the year 2000 - 2015. Thus, an inference could be drawn that a marginal increase in oil pipeline vandalism in the Niger Delta could have a direct effect on volume of oil spill ceteris paribus.

Another inference drawn from figure 2.2 is that number of oil spills marginally increased between 1998 – 2005, after which it embarked on a notable decline from 2005 – 2015. Figure 2.2 also shows a notable decline in pipeline vandalism, number of oil spills and volume of oil spills between 2010 – 2015. Several factors could explain this decline. The arguments in Shell Vs Isaiah (1997), and those by Amnesty International (2009), Frynas (2009) and EIA 2016 poor reporting of oil spills and pipeline vandalism could suffice.

CHAPTER SIX:
SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

6.1 The following findings were made:

i. There is a significant effect of Grievance management on the Profitability of oil producing companies in the Niger Delta region of Nigeria

ii. That an increase in oil pipeline vandalism results to a significant decrease of 27% in the profitability of oil producing companies in the Niger Delta region of Nigeria.

iii. That oil spill in the Niger Delta Region of Nigeria significantly contributes to a 38% decrease in the profitability of oil producing companies in the Niger Delta region of Nigeria.

iv. That an increase in the volume of oil spill brings about a significant decrease of 18% in the profitability of oil producing companies in the Niger Delta region of Nigeria.

v. that there is a significant effect oil spills on the economic development of host communities in the Niger Delta region of Nigeria.

vi. that Oil pipeline vandalism significantly inhibits the level of sustainable development of host communities in the Niger Delta Region of Nigeria.

vii. That any unit increase on the rate of oil pipeline vandalism contributes to a significant 20% decrease in the level of sustainable development of the host communities in the Niger Delta region of Nigeria.

viii. That there is a significant implication of grievance management on market leadership (market share) of selected oil producing companies in the Niger Delta region of Nigeria.

ix. That the prevalence of pipeline vandalism hampers Nigeria's sustainable economic growth and development. The infrastructural damage and economic loss and sabotage associated with the oil pipeline vandalism are colossal though avoidable.

6.2 Conclusion

The goal of this study is to ascertain the implications of grievance management on the performance of petroleum companies in Nigeria. The findings of this study show that grievance management significantly affects the performance of oil producing companies in the Niger Delta region of Nigeria. Oil Producing Companies are in this dilemma because they have failed to adopt and implement the process steps for grievance management in their operations. SPDC and NAOC have not lived up to expectations in her Corporate Social Responsibility and has not given sufficient redress to the grievances of the oil host communities. Thus the premises and oil companies are literarily littered with gold while the host communities are in marshes and mud. This calls for periodic review of the operations or activities of SPDC and NAOC in their host communities in the Niger Delta. It is therefore concluded that effective grievance management strategies should be employed by petroleum companies for better performance in the host communities.

6.3 Recommendations:

a. That Petroleum Companies should institute effective grievance management channels by which local communities and company staff can voice their concerns about the operations of a company and get these concerns addressed to avoid the disquiet that ignites grievances and conflict which in turn affects the performance of oil companies, reduces capacity utilization, and engenders loss of manpower
b. That pipeline vandalism in the Niger Delta should be given appropriate attention with the development of necessary infrastructural programmes that could help meet the needs of host communities in Nigeria.
c. That oil producing Companies should abide by the UN Guiding Principles on remediation which demands that where a company identifies that it has caused or contributed to negative human rights impacts, it should provide for or cooperate in their remediation through a legitimate processes.
d. That Companies should establish or participate in effective operational-level grievance management process for stakeholders who may be negatively impacted by company activities, for effective grievances management.

e. That the oil host community development struggle of the Niger Delta should be placed within the preview of a larger Nigerian agenda such that the dynamics of power calculus will favour the development of oil host communities who are in the minority above what is currently available..
f. That the Petroleum Industry Bill should be passed by the legislature and signed to law by the president of the Federal Republic of Nigeria.
g. That the Presidency should put in place a fair and transparent compensation and reparations system for host communities impacted by oil spills and environmental degradation.
h. That the Federal Government should Strengthen the role of the National Oil Spill Detection and Response Agency (NOSDRA) by ensuring that the agency has adequate staff, financial resources and equipment to carry out its functions properly and independently of the oil companies.
i. The Federal government should implement the Niger delta Regional Development Master Plan 2004 which is a coherent and integrated master plan for a holistic, all-inclusive development of the Niger Delta. This is a blue print for sustainable development in the Niger Delta.

6.4 Suggestions for further study

Further researches could focus on the following:

1. An assessment of the grievance management mechanisms alignment of oil producing companies in Nigeria with internationally-agreed best practice principles in the oil sector
2. Developing Appropriate strategies to designing and implementing effective grievance management mechanisms for oil companies in Nigeria
3. Understanding the level of integration between grievance management mechanisms and sustainable community development in oil host communities in Nigeria
4. Drawing the line between grievance motivated oil spills and pipeline rupture generated oil spills in the Niger Delta of Nigeria.

REFERENCE

Adekola G. I; Okogbule, E. I. (2013). Relationship between Shell Petroleum Development Company (SPDC) and her host communities in the promotion of community development in Rivers State, Nigeria. International Education Research, Volume I Issue 2. Online Publication by Science and education Centre of North America.

Aghalino, S. O., (2004). Oil Firms and Corporate Social Responsibility in Nigeria: The Case of Shell Petroleum Development Company. Ayebaye Babcock Journal of History and International Studies Babcock University Ilisan Remo, Vol.2 pp. 1-17.

Ajibade, L.T. & Awomuti, A.(2009) Petroleum Exploitation or Human Exploitation? An Overview of Niger Delta Oil Producing Communities in Nigeria, African Research Review. An International Multi Disciplinary Journal Vol 3 no1 pp 111-124.

Alawode, A.J., Ogunleye, I. O., (2011). Maintenance, Security, and Environmental Implications of Pipeline Damage and Ruptures in the Niger Delta Region. The Pacific Journal of Science and Technology. page 565 http://www.akamaiuniversity.us/PJST.htm. Retrieved 23rd June, 2015

Amnesty International (2009): Nigeria: Petroleum, Pollution and Poverty in The Niger Delta. Report Document . https://www.amnesty.org. Retrieved 15th May, 2015.

Anifowoshe,B., Lawler, D.., Horst, D., Chapman, L., (2011) Attacks on oil transport pipelines in Nigeria: A quantitative exploration and possible explanation of observed patterns. www.elsevier.com/locate/apgeog. Retrieved 20th August, 2015

Babatunde, A. O., (2012), An Analytical Evaluation of the Cost of the Conflict in the niger delta. Journal of Conflictology. Volume 3, Issue 1. Pp. 50-58, http://journal-of-conflictology.uoc.edu. Retrieved 20th November 2015.

Balouga, J. (2009), The Niger Delta: Defusing The Time Bomb..International Association for Energy Economies. First Quarter, 2009, pp. 8-11 https://www.iaee.org/documents. Retrieved 23rd October 2015

Barrick Beyond Borders (2016) Barrick's grievance mechanism officers share experiences, best practices and challenges http://barrickbeyondborders.com/people/2016/01/barrick-grievance-mechanism-officers-share-experiences Jan 8, 2016. Retrieved 8th August 2016.

Boele, R., Fabig, H., Wheeler, D. 2001. "The Story of Shell, Nigeria and the Ogoni People – Environment, Economy, Relationships: Conflict and Prospects for Resolution." Sustainable Development. 9:74-86. John Wiley & Sons Ltd. Volume 9, Issue 2, May 2001. Retrieved 20th June 2015

Brume, F.,(2006), Oil Pipeline Vandalisation In The Niger Delta. Urhobo Historical Society www.waado.org. Retrieved 26th June 2015.

Business and Human Rights resource Center (2015). Long-awaited victory as Shell finally pays out £55 million over Niger Delta oil spills. Nov 11, 2015. Retrieved 15th September 2016. www.businesshumanrights.org/en/shell-lawsuit-re-oil-spills-bodo-community-in-nigeria. Retrieved 15th September 2016.

Cahn, D., Sonnenberg, S., & Zandvliet, L.,(2011). Report on Pilotting Principles for Effective Company-stakeholder Grievance Mechanisms. www.business-humanrights.org. Retrieved 20th June 2015.

Carter, N., Bryant-Lukosius, D., Dicenso, A., Blythe, J., & Neville, A. J., (2014). The Use of Triangulation in Qualitative Research. Oncology Nursing Forum. Vol. 41, No. 5

Centre For Social Responsibility in Mining, -CSRM- (2009) Community Complaints and Grievance Mechanisms and the Australian Minerals Industry, Queensland, Australia. www.csrm.uq.edu.au. Retrieved 16th June 2015.

Chand, S., (2015) Grievance handling: Definitions, Features, Causes & Effects. The next Generation Library , India..

Collier, P. and Hoeffler, A. (2005). Resource Rents, Governance, and Conflict. Journal of Conflict Resolution, 49(4): 625-33.

Complaint Advisor Ombudsman (CAO) (2015) Annual Report www.cao.ombudsman.org. Retrieved 23rd August 2015

CSRM (2009) Community Complaints and Grievanve Mechanisms and the Australian Minerals Industry , Second Discussion paper. Centre for Social Responsibility in Mining Australia. www.csrm.uq.edu.au Retrieved 20th August 2015.

Daily Trust (2015) 2014 Year of Industrial Actions http://www.dailytrust.com.ng/daily/labour/43513-2014-year-of-industrial-actions. Retrieved 10th April 2016

Daud, Z., Isa, M.F.M., Nor, W. S. M., & Zainol, Z., (2013) Do we need to Train Our managers in Handling Grievances?. International Journal of Business and Social Sciences, Malaysia. Vol. 4, No. 3.

Eluka, J., Chukwu, B. I., Mba, I., (2013), Research and Sustainable development by Agip & Shell in Nigeria: Overcoming Exclusion, Strengthening Inclusion.. www.iiste.org. Retrieved 26th June 2015.

Enemaku, S. O. (2006). Community Relations and Oil-Related Conflicts in the Niger Delta, Nigeria. "Norway, Nigeria and Oil", Norwegian Council for Africa, Oslo.

Energy Information Administration. –EIA- (2012) . Country Analysis Brief: Nigeria. www.eia.doe.gov Retrieved 10th October 2015

Energy Information Administration. –EIA- (2015) . Country Analysis Brief: Nigeria. February 27th 2015. www.eia.doe.gov Retrieved 10th October 2015

Energy Information Administration. –EIA- (2016) . Country Analysis Brief: Nigeria. May 6th 2016. www.eia.doe.gov Retrieved 10th October 2016

Etekpe, A., & Okoli, P,. (2010) Oil Pipeline Vandalism and the Socio-economic effects in Nigeria's Niger Delta Region. http://www.ssrn.com/abstracts=1723169. Retrieved 10th October 2015

Frynas, G. J., (2009) "Legal Change in Africa, "Evidence from oil-related litigation in Nigeria", Journal of African Law, Vol 43, No. 2 pp.128.

Gujarati D. N., Porter C. D., & Gunasekar, S. (2012). Basic Econometrics (5th ed.). New Delhi, Tata McGraw-Hill Education Private Limited.

Harris , J. M., (2000), Basic Principles of Sustainable Development. Global Development And Environment Institute, Medford, USA. http://ase.tufts.edu/gdae

Hills. C. (2010) Community- Company Grievance Resolution: A guide to the Australian Mining Industry. Oxfam Australia

Ibeanu, O. (2000) Oiling the friction: Environmental Conflict management in the Niger delta. Change & Security Project Report, Issue 6 (Summer 2000). https://www.wilsoncenter.org/sites/default. Retrieved 5th August, 2016

Ikelegbe, A., (2010). Resource Conflicts and the Post Conflict Transition in the Niger delta CPED www.cpedngonline.org monographs

International Council for Mining and Metals (ICMM) (2009), handling and resolving local level Concerns and Grievances. www.icmm.com. Retrieved 5th August, 2015

International Crisis Group Africa, (2015) Curbing Violence in Nigeria (III): Revisiting the Niger Delta Report. Africa Report N°231 | 29 September 2015. Pp 1-32, Belgium. brussels@crisisgroup.org.. Retrieved 5th August, 2016

International Finance Corporation (IFC) (2009) . Addressing Grievance from project Affected Communities, Good Practice note. International finance corporation 2121 pennsylvania avenue, nwwashington, dc 20433, usa www.IFC.org

IPIECA., (2012) The global oil and gas industry association for environmental and social issues; Community grievance mechanisms in the oil and gas industry- A manual for implementing operational-level grievance mechanisms and designing corporate frameworks. 5th Floor, 209–215 Blackfriars Road, London SE1 8NL, United Kingdom E-mail: info@ipieca.org Internet: www.ipieca.org.

IPIECA., (2015) The global oil and gas industry association for environmental and social issues; Community grievance mechanisms in the oil and gas industry- A manual for implementing operational-level grievance mechanisms and designing corporate frameworks. 5th Floor, 209–215 Blackfriars Road, London SE1 8NL, United Kingdom E-mail: info@ipieca.org Internet: www.ipieca.org.

Kadafa, A. A., (2012). Oil Exploration and Spillage in the Niger Delta of Nigeria. Civil and Environmental Research Vol 2,No 3. www.iiste.org Retrieved 5th May, 2015

Maitland, A., & Chapman M. (2014). Oil Spills in the Niger Delta: Proposals for Effective Non-Judicial Grievance Mechanism. Produced for Stakeholder Democracy network, Abuja. Jul 29, 2014 www.stakeholderdemocracy.org/.../Annex-8-OIL-SPILLS-IN-THE-NIG. Retrieved 15th January, 2015

McNamara, C., (2011) Basics of Conflict Management; Free Management Library; www.managementhelp,org/intrpsnl/basics.htl Retrieved 5th July, 2015

Nagendo F., & Fahey T., (2014), Economic displacement: A case of oil Exploration in Uganda , Tullow Oil. www.conferences.iaia.org Retrieved 6th July, 2015

New Jersey herald (2012) Nigeria villages sue Shell in UK court over spills 23rd March, 2012. www.njherald.com. Retrieved 18th June 2015

National Bureau of Statistics (2013) Abuja http://www.nigerianstat.gov.ng Retrieved 5th July, 2015

National Bureau of Statistics (2010) Abuja http://www.nigerianstat.gov.ng Retrieved 5th July, 2015

Niger Delta Avengers (2016) http://www.nigerdeltaavengers.org/. Retrieved 8th October 2016

Nigeria Agip Oil Company –NAOC- Company Profile www.eni.com Retrieved 5th April, 2015

Nigeria Extractive Industry Transparency Initiative (NEITI) (2013): Financial Audit Report Assessing and Reconciling Financial Flows within Nigeria's Oil and gas Industry (2009 – 2011) www.neiti.org.ng/index.php?q=documents/audit-report-2009-2011 Retrieved 5th April, 2015.

Nigerian National Petroleum Corporation (2014). "Nigerian Oil Production Data", Oil Digest, 22(2):45-48. Retrieved 19th July 2016

Nwilo, P. C., & Badejo, O.T.,(2005).Oil Spill Problems and management in the Niger Delta. International Oil Spill Conferenca, Miami, Florida, USA.

Nwilo, P. C., & Badejo, O.T.,(2006). Impacts and Management of Oil Spill Pollution along the Nigerian Coastal Areas. Miami, Florida, USA.

Nworgu, B. G. (2012). Educational research: Basic issues & methodology (2nd ed.). Nsukka, Enugu: University Trust Publishers.

Nwokolo, N,. (2009) From Grievance to greed: An analysis of violent conflicts in oil bearing communities in Nigeria. www.erd.eui.eu/media/nwokolo Retrieved 13th March 2015.

Odukoya, A. O., (2006) Oil and Sustainable Development in Nigeria: A Case of Study the Niger Delta. Department of Political Science, University of Lagos, Akoka, Yaba, Lagos, Nigeria

Ogori. H., (2009), Organizational Conflict and its effects on Organizational Performance. Research Journal of Business Management,3: 16-24. www.scialert.net Retrieved 13th March 2016.

Olorunsogo A., (2011) Nigerian Content, Oil and Gas Employment. www.birmingham.academia.edu Retrieved 18th March 2015.

Onuoha, F., (2008) Oil Pipeline sabotage in Nigeria: Dimensions, actors and implications for national security. http://www.issafrica.org/topics/environment Retrieved 24th March 2015.

Oyefusi, A., (2007). "Oil and the Propensity to Armed Struggle in the Niger Delta region of Nigeria.". World Bank Policy Research Working Paper .http://econ.worldbank.org/external/default/main?pagePK=6416523. Retrieved 13th March 2015.

Okoli, A. C., Orinya.I, (2013) Oil Pipeline vandalism and Nigeria's National Security. Global Journal of Human Social Science. https://globaljournals.org/.../7-Oil-Pipeline-Vandalism-and-Nigerias Retrieved 14th July 2015.

Oluwatuyi, O. & Ileri, O. N., (2013). Petrol tanker disaster, pipeline vandalization and impacts on regional development in Nigeria. International Business and Management, Vol. 7, No 1, 2013,pp.112-116. Canadian Research & Development Center of Science and Culture, www.cscanada.org Retrieved 13th March 2015.

Peck. S., & Dauncey, G., (2012) 12 Features of Sustainable community Development. The cardinal Group Inc. www.cardinalgroup.ca Retrieved 18th March 2015.

Rees C., (2011) Piloting Principles of Effective Company-Stakeholder Grievance Mechanisms: A Report of Lessoned learned. Harvard Kennedy School. Corporate Responsibility Initiative

Rahim, M.A (2002) Towards a theory of managing Organisational conflict.The International journal of Conflict management. 13, 206-235

Ruggie, J., (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework. United Nations Human Rights Council. Geneva: 2011.

Ruggie, J., (2009) Just Business: Why Companies must pay attention to Human Rights, Canadian Business for Social Responsibility Canada. https://business-humanrights.org/.../Ruggie Retrieved 5th August 2015

Sampson ,E (2013). "Oil Resource Dependency: Emerging Threats and Concerns", Zenith Economic Quarterly, 9(4):30-38. Retrieved 10th June 2015

Shift Project (2012) Remediation and Operation-Level Grievance Mechanism. www.shiftproject.org Retrieved 15th May 2015

The Constitition of the Federal Republi c of Nigeria (1999) www.nigeria-law.org. Retrieved 10th September 2015

The European Commission (2012) Globalisation and the European Union – EU Centre , Singapore. www.eucentre.sg Retrieved 25th August 2015

The Gaurdian (2015) "Oil Workers Issue Seven Day Altimatum" http://guardian.ng/appointments/oil-workers-issue-seven-day-ultimatum-on-chevron-crisis/ 23 September 2015. Retrieved 5th August 2016

The Nigerian Voice (2014) Pengassan- Nupeng begin Nationwide Strike. www.thenigerianvoice.com/news/.../1/pengassan-nupeng-begin-nationwide-stri.html. Retrieved 10th May2015

The Premium Times (2015) “Nupeng Pengasson Threaten Strike Over Agip” www.premiumtimesng.com/.../186658-nupeng-pengassan-threaten-strike-over-agip-a. Retrieved 14th May 2016

UNDP 2006: Niger Delta Human Development Report United Nations Development Programme, UN House, Plot 617/618, Diplomatic Zone,Central Area District, P.M.B. 2851, Garki, Abuja, Nigeria

UNEP (2011) Environmental Assessment of Ogoniland Report www.unep.org/nigeria Retrieved 16th July 2015

UNEP (2016) Nigeria launches $1 Billion Ogoniland Clean-up and restoration Programme UN-REDD (2013). The United Nations Collaborative Programs on Reducing Emissions in Developing Countries www.unep,org/newscenter/default Retrieved 17th September 2016

United Nations Development Report (2006). UNDP, Abuja.

United Nations (2011) Implementing the United Nations "Protect, Respect and Remedy" Framework, United Nations Human Rights Office of the High Commissioner, HR/PUB

Wadhwani S., (2014) Causes and Effects of Grievance in Small companies. International Journal of Advanced Information Sciences and Technology. India. June 2014.

World Business Council on Sustainable Development (WBCSD) (2008) www.wbcsd.org Retrieved 17th July 2015

World Business Council on Sustainable Development (WBCSD) (2000). Corporate Social Responsibility www.wbcsd.org Retrieved 17th July 2015

Word Indicators (2016) www.worldbank.org/country/nigeria Retrieved 10th October 2016

Wilson, E,, & Blackmore, E., (2013) Dispute or Dialogue? Community perspectives on Company-led Grievance Mechanisms. Sustainable Community Development: an Interactional Perspective. International Institute for Environment and Development (IIED), United Kingdom. www.iied.org/pubs Retrieved 17th July 2015

OPEC Annual Statistics Bulletin (2014) www.opec.org Retrieved 17th July 2015

OPEC Annual Statistics Bulletin (2015) www.opec.org Retrieved 7th August 2016

The Land Use decree (1978)

The Petroleum Act (1969) [Petroleum Act].

www.shell.com.ng/aboutshell/ourbusiness

www.shellnigeria@shell.com December 2015

www.worldbank.org/research/conflict/papers/greedandgrievance.htm

Appendix 1

Structured Questionnaire

Department of Business Administration
Nnamdi Azikiwe University
Awka
2nd July, 2016

Dear Participant

Introductory Letter

I am a PhD research student of the Department of Business Administration, Nnamdi Azikiwe University, Awka. I am conducting a research on the topic '**Grievance Management and Performance of Petroleum Companies in Nigeria (1980-2015)'**

We gladly request your response to this questionnaire.

We assure you that information given will be used only for academic purpose and regarded secret.

Yours Sincerely

Ufomba Rex Eze.

Please tick the option that is most appropriate to you.

S/N	Section A.- Demographic Characteristics									
1	States	Rivers	1	Abia	2	Bayelsa	3	Imo	4	
2	Occupations	Private Worker	1	Civil Servant	2	Others	3			
3	Age	18-25	1	25-39	2	40 and Above	3			
4	Educational Qualification	WASCE/ OND	1	B.Sc./HND/BED	2	M.Sc. & Above	3			
5	Company Operating in your Locality	SPDC (Shell)	1	NAOC (AGIP)	2					

Please tick the option that best expresses your opinion on the items presented. The rating is: SA - Strongly **Agree; A – Agree; U, D – Disagree; SD – Strongly Disagree.**

S/No	B1:Market Leadership by Petroleum Companies	SA	A	D	SD
		1	2	3	4
1	To gain market leadership, petroleum companies seek to identify and satisfy the needs of their host communities				
2	Petroleum companies in your community engage in the management of grievances to strengthen their market leadership in the host communities.				
3	Scholarships, bursary awards, text books, and teaching aids are granted to host community scholars at the secondary, undergraduate, levels by petroleum companies to boost corporate leadership and image				
4	The leadership of SPDC in the petroleum Industry is due to her concern for the environmental safety and corporate social responsibilities in her host communities				
5	The poor concern for sustainable community development by oil companies and poor remedy for oil spills in host communities negatively affects the market leadership of SPDC and NAOC in Nigeria				
6	Use of the military to repress the just grievances of host communities negatively affects the market leadership of petroleum companies in host communities.				
7	Poor implementation of grievances management mechanisms and poor understanding and redress of the environmental impacts of oil exploration companies negatively affect the market leadership of SPDC and NAOC.				
8	To gain market leadership, oil companies need to integrate effective grievance management mechanisms into their daily operation schedules.				

S/No	B2:Pollution in Host communities	SA	A	D	SD
9	Air Pollution, gas Flaring, water pollution, and land degradation are notable in the host communities				
10	The Ecosystem, fisheries, and aquifers are often damaged by				

	oil spills from the oil companies facilities.				
11	Oil companies pollute the farmlands, arable lands, creeks and water ways thus contaminating supplies to the host communities.				
12	Clean up of oil pollution sites is adequately done and on time.				
13	Environmental degradation due to oil spills, and air and water pollution are endemic in the Niger delta due to oil pipeline vandalisation				
14.	Pollution due to oil spills, gas burning, and pipeline vandalisation negatively affects the economy of the host communities				
15	Because of oil exploration in your community, plants and animals do not grow well, fish have died, and there is hunger and poverty.				
16	Oil and gas pollution has constituted a health hazard to humans and animals in your community, as heavy chemical and metallic pollutants have contaminated drinking sources, air, and the ecosystem.				

S/No	**B3: Community Development**	SA	A	D	SD
17	Cottage industries established by petroleum companies are available in your host communities				
18	Well equipped health centers and hospitals maintained by petroleum companies are available in your host community				
19	Durable road networks with drainages are a common feature of petroleum host communities like yours.				
20	Markets for commodity exchange are built by petroleum companies in your host communities				
21	General Memorandum of Understanding (GMoU) for projects between host communities and petroleum companies enhance peaceful coexistence				
22	Youth Empowerment Schemes in host communities have eradicated unemployment and poverty				

23	There is reliable and adequate supply of electricity in host communities.				
24	Social development facilities like community Halls and recreation centers are common place in host communities				
25	Provision of infrastructural facilities in the community by petroleum companies promotes cordial relationship between the companies and your community				
26	Constant provision of community development projects like hospitals and markets, promote cordial relationship between your community and Petroleum companies.				

S/No	**B4: Grievance Management Mechanisms**	SA	A	D	SD
27	There is a community – company grievance management mechanism between oil companies and your community for settlement of complaints.				
28	Petroleum Companies engage your community in the design and implementation of their grievance mechanism				
29	Petroleum Companies acknowledge receipt of complaints and provide regular status updates by letter or telephone to complainants.				
30	Petroleum Companies meet face to face with complainants in the complainant's home, and allow complainants to be accompanied by a friend or family member to settlements				
31	Petroleum Companies seek feedback on the functioning of their grievance management mechanism through Community surveys				
32	Petroleum Companies analyse data on grievances and lessons that are learned are used to activate changes in policy or practice that can help prevent re-occurrences				
33	The effects of Pipeline vandalisation has compelled oil companies to create more room for dialogue between the government, the companies, and their host communities				
34	There is a process to track grievances and assess progress being made to resolve grievances				
35	The 13% share of petroleum proceeds given to the oil producing states and communities is satisfactory to oil				

	producing communities.				
36	The drop in federal revenue allocation to producing states from 50% in 1967 to 13% in 2015 is not responsible for the grievance in host communities				
37	Legal Provisions guiding the oil industries like the Petroleum Act of 1969 and the land use Decree of 1978 all serve as instruments of dispossession against the oil producing communities thus depriving them of their right to property				
38	Low production, oil theft, pipeline vandalisation, and incessant closures has made the profitability of oil companies to drop				
39	Respect for traditional authority and community culture by petroleum companies encourages good community-company relationship.				
40	Involvement of communities in choice, design and construction of community development project enhances good relationship between your host community and oil companies.				
41	Use of divide and rule strategy of leadership by Petroleum Companies often lead to hostile relationship between host communities and petroleum companies				

S/No	**B5**: **Sustainable Community Development**	SA	A	D	SD
42	Oil spills into the waters and land affect the ecosystem thus leading to low productivity of land and death of aquatic life.				
43	Host communities have insufficient and ill-equipped schools with dilapidating structures due to neglect by oil companies				
44	Oil spills have released dangerous hydrocarbons into the soil, air, and water ways thus polluting the environment with dangerous health consequences for humans and animals				
45	Petroleum companies have not lived up to expectations in her Corporate Social Responsibility to the oil host communities.				
46	Petroleum companies have a responsibility to develop effective responses to meet the development needs of the host Communities thus sustaining corporate integrity and image.				

47	Petroleum companies have contributed immensely to the availability of affordable housing in the community.				
48	Oil companies have assisted in the provision of sustainable electricity in your community				
49	Social amenities like roads and pipe borne water are sufficiently provided by oil companies for host communities				

S/No	**B6:Agricultural Development**	SA	A	D	SD
50	Agricultural productivity in the past ten years is lower than ever before in host communities due to the effects of pollution.				
51	Petroleum companies provide farmers in host communities with credit facilities to boost produce.				
52	Market gardening is promoted by petroleum companies to boost employment in host communities.				
53	Water pollution through oil spill has destroyed the aquatic and marine life of your community killing a lot of the fish and driving the rest to the deep waters thus hampering sustainable agricultural development.				
54	Improved seedlings and hybrid crop varieties are provided for rural farmers in host communities				
55	Training on fisheries and aquaculture is .given to riverine project displaced host communities.				
56	Petroleum companies enhance agricultural mechanization in host communities,				
57	Poultry and Animal husbandry is not promoted by petroleum companies				
58	Chemical Fertilizers are made available farmers in host communities by petroleum companies				

S/No	**B7:Pipeline Vandalism**	SA	A	D	SD
59	Equipment failure and corrosion of oil pipeline facilities are sometimes wrongly designated as sabotage and pipeline vandalism.				

60	Wild fires and loss to property and life are suffered by your host community due to pipeline vandalisation.				
61	Pragmatic infrastructural development of the oil producing communities will checkmate oil pipeline vandalisation.				
62	Pipeline Vandalisation often leads to oil spillage in host communities				
63	Loss of man hours of labour is one of the problem associated with pipeline vandalisation				
64	Greed by oil host communities and disregard for standing agreements between the oil host communities and the petroleum companies are a major cause of oil pipeline vandalism				
65	The ill effects of Pipeline vandalisation have compelled petroleum companies to create more room for dialogue between companies and host communities.				
66	Oil pipeline vandalisation in host communities has led to loss of lives and property				

Appendix 2:

Response data for testing hypothesis three.

S/N	$\sum X$	$\sum Y$	$\sum X^2$	$\sum Y^2$	$\sum XY$
1	12	25	144	625	300
2	6	35	36	1225	210
3	12	26	144	676	312
4	7	36	29	1296	252
5	5	24	25	1600	200
6	12	34	144	1156	408
7	5	35	25	1225	175
8	6	30	36	900	180
9	12	40	144	1600	480
10	6	38	36	1444	228
11	6	37	36	1369	222
12	14	25	196	625	350
13	6	38	36	1444	228
14	12	34	144	1156	408
15	7	37	49	1369	259
16	6	40	36	1600	240
17	13	38	169	1444	494
18	6	37	36	1369	222
19	6	33	36	1089	198
20	12	20	144	400	240
21	3	40	9	1600	120
22	8	33	64	1089	264
23	6	35	36	1225	210
24	7	35	49	1225	245
25	12	25	144	625	300
26	7	37	49	1369	259
27	6	36	36	1296	216
28	12	38	144	1444	456
29	4	38	16	1444	152
30	11	38	121	1444	418
31	5	41	25	1681	205
32	12	14	144	1681	492
33	6	35	36	1225	210
34	15	21	225	441	315
35	8	38	64	1444	304

36	13	23	169	529	299
37	13	25	169	625	325
38	8	37	64	1369	296
39	10	41	100	1681	410
40	14	35	196	1225	490
41	6	35	36	1225	210
42	8	36	64	1296	288
43	7	37	49	1369	259
44	14	22	196	484	308
45	8	33	64	1089	264
46	6	37	36	1369	222
47	11	26	121	676	286
48	12	39	144	1521	468
49	13	26	169	676	338
50	8	35	64	1225	280
51	13	26	169	676	338
52	6	39	36	1521	234
53	14	41	196	1681	574
54	8	41	64	1681	328
55	6	37	36	1369	222
56	5	34	25	1156	170
57	7	36	49	1296	252
58	6	33	36	1089	198
59	7	42	49	1764	294
60	13	20	169	400	260
61	13	37	169	1369	481
62	6	40	36	1600	240
63	6	34	36	1156	204
64	7	35	49	1225	245
65	8	41	64	1681	328
66	7	33	49	1089	231
67	12	36	144	1296	432
68	13	37	169	1369	481
69	5	41	25	1681	205
70	8	40	64	1600	320
71	13	25	169	625	325
72	5	40	25	1600	200
73	7	41	49	1681	287
74	14	28	196	784	392
75	12	24	144	576	288
76	6	34	36	1156	204

77	12	37	144	1369	444
78	14	23	196	529	322
79	7	36	49	1296	252
80	13	25	169	625	325
81	6	33	36	1089	198
82	7	34	49	1156	238
83	12	24	144	676	312
84	13	28	169	784	364
85	14	42	196	1764	588
86	7	43	49	1849	301
87	12	43	144	1849	516
88	7	41	49	1681	287
89	7	35	49	1225	245
90	7	36	49	1296	252
91	6	36	36	1296	216
92	11	40	121	1600	440
93	7	34	49	1156	238
94	6	38	36	1444	228
95	12	28	144	576	288
96	6	35	36	1225	210
97	8	35	64	1225	280
98	14	27	196	729	378
99	6	39	36	1521	234
100	4	38	16	1444	152
101	5	35	25	1225	175
102	12	40	144	1600	480
103	6	36	36	1296	216
104	5	36	25	1296	180
105	12	34	144	1156	408
106	6	36	36	1296	216
107	6	38	36	1444	222
108	6	37	36	1369	222
109	12	25	144	625	300
110	13	37	169	1369	481
111	8	36	64	1296	288
112	13	27	169	729	351
113	8	35	64	1225	280
114	12	26	144	676	313
115	6	42	36	1764	252
116	14	24	196	576	336
117	6	34	36	1156	204

118	14	40	196	1600	560
119	7	36	49	1296	252
120	6	34	36	1156	204
121	6	34	36	1156	204
122	13	24	169	576	312
123	5	39	25	1521	195
124	12	35	144	1225	420
125	8	39	64	1521	312
126	14	37	196	1369	518
127	13	25	169	625	325
128	9	43	81	1849	387
129	13	29	169	841	377
130	6	37	36	1369	222
131	6	34	36	1156	204
132	11	37	121	1369	407
133	4	36	16	1296	144
134	13	18	169	324	234
135	7	36	49	1296	252
136	1	36	49	1296	252
137	12	36	144	1296	432
138	7	41	49	1681	287
139	12	30	144	900	360
140	8	39	64	1521	312
141	7	41	49	1681	287
142	6	34	36	1156	204
143	8	41	64	1681	328
144	6	36	36	1296	216
145	7	36	49	1296	252
146	6	36	36	1296	216
147	12	35	144	1225	420
148	12	26	144	676	312
149	14	22	196	484	308
150	8	36	64	1296	288
151	12	26	144	676	312
152	11	30	121	900	330
153	12	22	144	484	264
154	7	41	49	1681	287
155	14	37	196	1369	518
156	7	37	49	1369	259
157	9	36	81	1296	324
158	6	41	36	1681	246

159	11	25	121	625	275
160	6	37	36	1369	222
161	6	38	36	1444	228
162	13	27	169	729	351
163	14	37	196	1369	518
164	7	37	49	1369	259
165	9	36	81	1296	324
166	6	41	36	1681	246
167	11	25	121	625	275
168	6	37	36	1369	222
169	6	38	36	1444	228
170	13	27	169	729	351
171	13	43	169	1849	559
172	6	36	36	1296	216
173	8	36	64	1296	288
174	13	30	169	900	390
175	11	39	121	1521	429
176	13	26	169	676	338
177	6	38	36	1444	228
178	13	27	169	729	351
179	14	37	196	1369	518
180	7	37	49	1369	259
181	9	36	81	1296	324
182	6	41	36	1681	246
183	11	25	121	625	275
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185	6	38	36	1444	228
186	13	27	169	729	351
187	13	43	169	1849	559
188	6	36	36	1296	216
189	8	36	64	1296	288
190	13	30	169	900	390
191	11	39	121	1521	429
192	13	26	169	676	338
193	7	37	49	1369	259
194	8	36	64	1296	288
195	14	29	196	841	406
196	6	42	36	1764	252
197	10	40	100	1600	400
198	12	27	144	729	324
199	11	25	121	625	275

200	6	37	36	1369	222
201	6	38	36	1444	228
202	13	27	169	729	351
203	13	43	169	1849	559
204	6	36	36	1296	216
205	8	36	64	1296	288
206	13	30	169	900	390
207	11	39	121	1521	429
208	13	26	169	676	338
209	7	37	49	1369	259
210	8	36	64	1296	288
211	14	29	196	841	406
212	6	42	36	1764	252
213	10	40	100	1600	400
214	12	27	144	729	324
215	13	26	169	676	338
216	6	36	36	1296	216
217	11	41	121	1681	451
218	7	42	49	1764	294
219	13	30	169	900	390
220	7	36	49	1296	252
221	13	26	169	676	338
222	7	37	49	1369	259
223	8	36	64	1296	288
224	14	29	196	841	406
225	6	42	36	1764	252
226	10	40	100	1600	400
227	12	27	144	729	324
228	13	26	169	676	338
229	6	36	36	1296	216
230	11	41	121	1681	451
231	7	42	49	1764	294
232	13	30	169	900	390
233	7	36	49	1296	252
234	11	38	121	1444	418
235	8	38	64	1444	304
236	12	27	144	729	324
237	6	36	36	1296	216
238	7	42	49	1764	294
239	5	41	25	1681	205
240	9	37	81	1369	333

241	13	43	169	1849	559
242	7	36	49	1296	252
243	14	29	196	841	406
244	6	42	36	1764	252
245	10	40	100	1600	400
246	12	27	144	729	324
247	13	26	169	676	338
248	6	36	36	1296	216
249	11	41	121	1681	451
250	7	42	49	1764	294
251	13	30	169	900	390
252	7	36	49	1296	252
253	11	38	121	1444	418
254	8	38	64	1444	304
255	12	27	144	729	324
256	6	36	36	1296	216
257	7	42	49	1764	294
258	5	41	25	1681	205
259	9	37	81	1369	333
260	13	43	169	1849	559
261	7	36	49	1296	252
262	11	42	121	1764	462
263	6	34	36	1156	204
264	8	36	64	1296	288
265	13	26	169	676	338
266	6	36	36	1296	216
267	11	41	121	1681	451
268	7	42	49	1764	294
269	13	30	169	900	390
270	7	36	49	1296	252
271	11	38	121	1444	418
272	8	38	64	1444	304
273	12	27	144	729	324
274	6	36	36	1296	216
275	7	42	49	1764	294
276	5	41	25	1681	205
277	9	37	81	1369	333
278	13	43	169	1849	559
279	7	36	49	1296	252
280	11	42	121	1764	462
281	6	34	36	1156	204

282	8	36	64	1296	288
283	8	36	64	1296	288
284	5	36	25	1296	180
285	9	36	81	1296	324
286	6	42	36	1764	252
287	8	38	64	1444	304
288	12	27	144	729	324
289	6	36	36	1296	216
290	7	42	49	1764	294
291	5	41	25	1681	205
292	9	37	81	1369	333
293	13	43	169	1849	559
294	7	36	49	1296	252
295	11	42	121	1764	462
296	6	34	36	1156	204
297	8	36	64	1296	288
298	12	27	144	729	324
299	13	26	169	676	338
300	6	36	36	1296	216
301	11	41	121	1681	451
302	7	42	49	1764	294
303	13	30	169	900	390
304	7	36	49	1296	252
305	11	38	121	1444	418
306	8	38	64	1444	304
307	12	27	144	729	324
308	13	26	169	676	338
309	6	36	36	1296	216
310	11	41	121	1681	451
311	7	42	49	1764	294
312	13	30	169	900	390
313	7	36	49	1296	252
314	11	38	121	1444	418
315	8	38	64	1444	304
316	12	27	144	729	324
317	6	36	36	1296	216
318	7	42	49	1764	294
319	5	41	25	1681	205
320	9	37	81	1369	333
321	13	43	169	1849	559
322	7	36	49	1296	252

323	11	42	121	1764	462
324	6	34	36	1156	204
325	8	36	64	1296	288
326	8	36	64	1296	288
327	5	36	25	1296	180
328	9	36	81	1296	324
329	6	42	36	1764	252
330	8	38	64	1444	304
331	12	27	144	729	324
332	6	36	36	1296	216
333	7	42	49	1764	294
334	5	41	25	1681	205
335	9	37	81	1369	333
336	13	43	169	1849	559
337	7	36	49	1296	252
338	11	42	121	1764	462
339	6	34	36	1156	204
340	8	36	64	1296	288
341	12	27	144	729	324
342	13	26	169	676	338
343	6	36	36	1296	216
344	11	41	121	1681	451
345	7	42	49	1764	294
346	13	30	169	900	390
347	7	36	49	1296	252
348	11	38	121	1444	418
349	8	38	64	1444	304
350	12	27	144	729	324
351	9	37	81	1369	333
352	13	43	169	1849	559
353	7	36	49	1296	252
354	11	42	121	1764	462
355	6	34	36	1156	204
356	8	36	64	1296	288
357	12	27	144	729	324
358	13	26	169	676	338
359	6	36	36	1296	216
360	11	41	121	1681	451
361	7	42	49	1764	294
362	13	30	169	900	390
363	7	36	49	1296	252

364	11	38	121	1444	418
365	8	38	64	1444	304
366	12	27	144	729	324
367	13	26	169	676	338
368	6	36	36	1296	216
369	11	41	121	1681	451
370	7	42	49	1764	294
371	13	30	169	900	390
372	7	36	49	1296	252
373	11	38	121	1444	418
374	8	38	64	1444	304
375	12	27	144	729	324
376	6	36	36	1296	216
377	7	42	49	1764	294
378	5	41	25	1681	205
379	9	37	81	1369	333
380	13	43	169	1849	559
381	7	36	49	1296	252
382	11	42	121	1764	462
	3475	13395	35091	484550	119263

Appendix 3:

Response data for testing of hypothesis 4

S/N	∑X	∑Y	$\sum X^2$	$\sum Y^2$	∑XY
1	13	26	169	676	338
2	8	35	64	1225	280
3	13	26	169	676	338
4	6	39	36	1521	234
5	14	41	196	1681	574
6	8	41	64	1681	328
7	6	37	36	1369	222
8	5	34	25	1156	170
9	7	36	49	1296	252
10	6	33	36	1089	198
11	7	42	49	1764	294
12	13	20	169	400	260
13	13	37	169	1369	481
14	6	40	36	1600	240
15	6	34	36	1156	204
16	7	35	49	1225	245
17	8	41	64	1681	328
18	7	33	49	1089	231
19	12	36	144	1296	432
20	13	37	169	1369	481
21	5	41	25	1681	205
22	8	40	64	1600	320
23	13	25	169	625	325
24	5	40	25	1600	200
25	7	41	49	1681	287
26	14	28	196	784	392
27	12	24	144	576	288
28	6	34	36	1156	204
29	12	37	144	1369	444
30	14	23	196	529	322
31	7	36	49	1296	252
32	13	25	169	625	325
33	6	33	36	1089	198
34	7	34	49	1156	238
35	12	24	144	676	312

36	13	28	169	784	364
37	14	42	196	1764	588
38	7	43	49	1849	301
39	12	43	144	1849	516
40	7	41	49	1681	287
41	7	35	49	1225	245
42	7	36	49	1296	252
43	6	36	36	1296	216
44	11	40	121	1600	440
45	7	34	49	1156	238
46	6	38	36	1444	228
47	12	28	144	576	288
48	6	35	36	1225	210
49	8	35	64	1225	280
50	14	27	196	729	378
51	6	39	36	1521	234
52	4	38	16	1444	152
53	5	35	25	1225	175
54	12	40	144	1600	480
55	6	36	36	1296	216
56	5	36	25	1296	180
57	12	34	144	1156	408
58	6	36	36	1296	216
59	6	38	36	1444	222
60	6	37	36	1369	222
61	12	25	144	625	300
62	13	37	169	1369	481
63	8	36	64	1296	288
64	13	27	169	729	351
65	8	35	64	1225	280
66	12	26	144	676	313
67	6	42	36	1764	252
68	14	24	196	576	336
69	6	34	36	1156	204
70	14	40	196	1600	560
71	7	36	49	1296	252
72	6	34	36	1156	204
73	7	41	49	1681	287
74	14	28	196	784	392
75	12	24	144	576	288
76	6	34	36	1156	204

77	12	37	144	1369	444
78	14	23	196	529	322
79	7	36	49	1296	252
80	13	25	169	625	325
81	6	33	36	1089	198
82	7	34	49	1156	238
83	12	24	144	676	312
84	13	28	169	784	364
85	14	42	196	1764	588
86	7	43	49	1849	301
87	12	43	144	1849	516
88	7	41	49	1681	287
89	7	35	49	1225	245
90	7	36	49	1296	252
91	6	36	36	1296	216
92	11	40	121	1600	440
93	7	34	49	1156	238
94	6	38	36	1444	228
95	12	28	144	576	288
96	6	35	36	1225	210
97	8	35	64	1225	280
98	14	27	196	729	378
99	6	39	36	1521	234
100	4	38	16	1444	152
101	5	35	25	1225	175
102	12	40	144	1600	480
103	6	36	36	1296	216
104	5	36	25	1296	180
105	12	34	144	1156	408
106	6	36	36	1296	216
107	6	38	36	1444	222
108	6	37	36	1369	222
109	12	25	144	625	300
110	13	37	169	1369	481
111	8	36	64	1296	288
112	13	27	169	729	351
113	8	35	64	1225	280
114	12	26	144	676	313
115	6	42	36	1764	252
116	14	24	196	576	336
117	6	34	36	1156	204

118	14	40	196	1600	560
119	7	36	49	1296	252
120	6	34	36	1156	204
121	6	34	36	1156	204
122	13	24	169	576	312
123	5	39	25	1521	195
124	12	35	144	1225	420
125	8	39	64	1521	312
126	14	37	196	1369	518
127	13	25	169	625	325
128	9	43	81	1849	387
129	13	29	169	841	377
130	6	37	36	1369	222
131	6	34	36	1156	204
132	11	37	121	1369	407
133	4	36	16	1296	144
134	13	18	169	324	234
135	7	36	49	1296	252
136	1	36	49	1296	252
137	12	36	144	1296	432
138	7	41	49	1681	287
139	12	30	144	900	360
140	8	39	64	1521	312
141	7	41	49	1681	287
142	6	34	36	1156	204
143	8	41	64	1681	328
144	6	36	36	1296	216
145	7	36	49	1296	252
146	6	36	36	1296	216
147	12	35	144	1225	420
148	12	26	144	676	312
149	14	22	196	484	308
150	8	36	64	1296	288
151	12	26	144	676	312
152	11	30	121	900	330
153	12	22	144	484	264
154	7	41	49	1681	287
155	14	37	196	1369	518
156	7	37	49	1369	259
157	9	36	81	1296	324
158	6	41	36	1681	246

159	11	25	121	625	275
160	6	37	36	1369	222
161	6	38	36	1444	228
162	13	27	169	729	351
163	14	37	196	1369	518
164	7	37	49	1369	259
165	9	36	81	1296	324
166	6	41	36	1681	246
167	11	25	121	625	275
168	6	37	36	1369	222
169	6	38	36	1444	228
170	13	27	169	729	351
171	13	43	169	1849	559
172	6	36	36	1296	216
173	8	36	64	1296	288
174	13	30	169	900	390
175	11	39	121	1521	429
176	13	26	169	676	338
177	6	38	36	1444	228
178	13	27	169	729	351
179	14	37	196	1369	518
180	7	37	49	1369	259
181	9	36	81	1296	324
182	6	41	36	1681	246
183	11	25	121	625	275
184	6	37	36	1369	222
185	6	38	36	1444	228
186	13	27	169	729	351
187	13	43	169	1849	559
188	6	36	36	1296	216
189	8	36	64	1296	288
190	13	30	169	900	390
191	11	39	121	1521	429
192	13	26	169	676	338
193	7	37	49	1369	259
194	8	36	64	1296	288
195	14	29	196	841	406
196	6	42	36	1764	252
197	10	40	100	1600	400
198	12	27	144	729	324
199	11	25	121	625	275

200	6	37	36	1369	222
201	6	38	36	1444	228
202	13	27	169	729	351
203	13	43	169	1849	559
204	6	36	36	1296	216
205	8	36	64	1296	288
206	13	30	169	900	390
207	11	39	121	1521	429
208	13	26	169	676	338
209	7	37	49	1369	259
210	8	36	64	1296	288
211	14	29	196	841	406
212	6	42	36	1764	252
213	10	40	100	1600	400
214	12	27	144	729	324
215	13	26	169	676	338
216	6	36	36	1296	216
217	11	41	121	1681	451
218	7	42	49	1764	294
219	13	30	169	900	390
220	7	36	49	1296	252
221	13	26	169	676	338
222	7	37	49	1369	259
223	8	36	64	1296	288
224	14	29	196	841	406
225	6	42	36	1764	252
226	10	40	100	1600	400
227	12	27	144	729	324
228	13	26	169	676	338
229	6	36	36	1296	216
230	11	41	121	1681	451
231	7	42	49	1764	294
232	13	30	169	900	390
233	7	36	49	1296	252
234	11	38	121	1444	418
235	8	38	64	1444	304
236	12	27	144	729	324
237	6	36	36	1296	216
238	7	42	49	1764	294
239	5	41	25	1681	205
240	9	37	81	1369	333

241	13	43	169	1849	559
242	7	36	49	1296	252
243	14	29	196	841	406
244	6	42	36	1764	252
245	10	40	100	1600	400
246	12	27	144	729	324
247	13	26	169	676	338
248	6	36	36	1296	216
249	11	41	121	1681	451
250	7	42	49	1764	294
251	13	30	169	900	390
252	7	36	49	1296	252
253	11	38	121	1444	418
254	8	38	64	1444	304
255	12	27	144	729	324
256	6	36	36	1296	216
257	7	42	49	1764	294
258	5	41	25	1681	205
259	9	37	81	1369	333
260	13	43	169	1849	559
261	7	36	49	1296	252
262	11	42	121	1764	462
263	6	34	36	1156	204
264	8	36	64	1296	288
265	13	26	169	676	338
266	6	36	36	1296	216
267	11	41	121	1681	451
268	7	42	49	1764	294
269	13	30	169	900	390
270	7	36	49	1296	252
271	11	38	121	1444	418
272	8	38	64	1444	304
273	12	27	144	729	324
274	6	36	36	1296	216
275	7	42	49	1764	294
276	5	41	25	1681	205
277	9	37	81	1369	333
278	13	43	169	1849	559
279	7	36	49	1296	252
280	11	42	121	1764	462
281	6	34	36	1156	204

282	8	36	64	1296	288
283	8	36	64	1296	288
284	5	36	25	1296	180
285	9	36	81	1296	324
286	6	42	36	1764	252
287	8	38	64	1444	304
288	12	27	144	729	324
289	6	36	36	1296	216
290	7	42	49	1764	294
291	5	41	25	1681	205
292	9	37	81	1369	333
293	13	43	169	1849	559
294	7	36	49	1296	252
295	11	42	121	1764	462
296	6	34	36	1156	204
297	8	36	64	1296	288
298	12	27	144	729	324
299	13	26	169	676	338
300	6	36	36	1296	216
301	11	41	121	1681	451
302	7	42	49	1764	294
303	13	30	169	900	390
304	7	36	49	1296	252
305	11	38	121	1444	418
306	8	38	64	1444	304
307	11	37	121	1369	407
308	4	36	16	1296	144
309	13	18	169	324	234
310	7	36	49	1296	252
311	1	36	49	1296	252
312	12	36	144	1296	432
313	7	41	49	1681	287
314	12	30	144	900	360
315	8	39	64	1521	312
316	7	41	49	1681	287
317	6	34	36	1156	204
318	8	41	64	1681	328
319	6	36	36	1296	216
320	7	36	49	1296	252
321	6	36	36	1296	216
322	12	35	144	1225	420

323	12	26	144	676	312
324	14	22	196	484	308
325	8	36	64	1296	288
326	12	26	144	676	312
327	11	30	121	900	330
328	12	22	144	484	264
329	7	41	49	1681	287
330	14	37	196	1369	518
331	7	37	49	1369	259
332	9	36	81	1296	324
333	6	41	36	1681	246
334	11	25	121	625	275
335	6	37	36	1369	222
336	6	38	36	1444	228
337	13	27	169	729	351
338	14	37	196	1369	518
339	7	37	49	1369	259
340	9	36	81	1296	324
341	6	41	36	1681	246
342	11	25	121	625	275
343	6	37	36	1369	222
344	6	38	36	1444	228
345	13	27	169	729	351
346	13	43	169	1849	559
347	6	36	36	1296	216
348	8	36	64	1296	288
349	13	30	169	900	390
350	11	39	121	1521	429
351	13	26	169	676	338
352	6	38	36	1444	228
353	13	27	169	729	351
354	14	37	196	1369	518
355	7	37	49	1369	259
356	9	36	81	1296	324
357	6	41	36	1681	246
358	11	25	121	625	275
359	6	37	36	1369	222
360	6	38	36	1444	228
361	13	27	169	729	351
362	13	43	169	1849	559
363	6	36	36	1296	216

364	8	36	64	1296	288
365	13	30	169	900	390
366	11	39	121	1521	429
367	13	26	169	676	338
368	7	37	49	1369	259
369	8	36	64	1296	288
370	14	29	196	841	406
371	6	42	36	1764	252
372	10	40	100	1600	400
373	12	27	144	729	324
374	11	25	121	625	275
375	6	37	36	1369	222
376	6	38	36	1444	228
377	13	27	169	729	351
378	13	43	169	1849	559
379	6	36	36	1296	216
380	8	36	64	1296	288
381	6	37	36	1369	222
382	6	34	36	1156	204
	3492	13311	35674	475809	118634

Appendix 4

Reliability Test For Survey Research

```
DATASET ACTIVATE DataSet1.

SAVE OUTFILE='E:\REV REX Untitled1.sav'

 /COMPRESSED.

 RELIABILITY /VARIABLES=Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15
Q16 Q17 Q18 Q19 Q20 Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29 Q30 Q31 Q32 Q33 Q34 Q35
Q36 Q37 Q38 Q39 Q40 Q41 Q42 Q43 Q44 Q45 Q46 Q47 Q48 Q49 Q50 Q51 Q52 Q53 Q54 Q55
Q56 Q57 Q58 Q59 Q60 Q61 Q62 Q63 Q64 Q65 Q66

 /SCALE('ALL VARIABLES') ALL

 /MODEL=ALPHA.
```

Reliability

Notes

Output Created		07-JULY-2016 17:12:58
Comments		
Input	Data	E:\REV REX Untitled1.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20
Missing Value Handling	Matrix Input	
	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.

Syntax		RELIABILITY /VARIABLES=Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16 Q17 Q18 Q19 Q20 Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29 Q30 Q31 Q32 Q33 Q34 Q35 Q36 Q37 Q38 Q39 Q40 Q41 Q42 Q43 Q44 Q45 Q46 Q47 Q48 Q49 Q50 Q51 Q52 Q53 Q54 Q55 Q56 Q57 Q58 Q59 Q60 Q61 Q62 Q63 Q64 Q65 Q66 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.08

[DataSet1] E:\REV REX Untitled1.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.786	66