



**NEAR EAST UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES  
DEPARTMENT OF INTERNATIONAL RELATIONS**

**STATE RESPONSES TO ECOLOGICAL CRISIS OF OIL  
PRODUCTION IN NIGER DELTA**

**M.A. THESIS**

**God'stime GAIUS**

**Nicosia  
August, 2021**

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**Supervisor  
Asst. Prof. Emine SÜLÜN**

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## Approval

We certify that we have read the thesis submitted by God'stime GAIUS titled “**State Responses to Ecological Crisis of Oil Production in Niger Delta**” and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of International Relations.

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## **Declaration**

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

God'stime GAIUS

...../...../2021

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## **Abstract**

### **State Responses to Ecological Crisis of Oil Production in Niger Delta**

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**Masters, Department of International Relations**

**Supervised by Asst. Prof. Emine SÜLÜN**

**August, 2021, 67pages**

The Nigerian government controls revenues from oil production and distributes it around the country leading to polluted waterways, streams and forests. The purpose of this study is to identify the impact of oil production on human and environmental security and to explore the extent to which these threats are translated into preventive policies while drafting energy policy strategies of the country. This study is a qualitative study. The source of data collection was secondary sources such as; journals, articles, the Nigerian Bureau of statistics web page and Niger Delta websites. Analysis was done on existing laws/regulations/directives, state bodies responsible for the governance of the oil resources of the Niger Delta region and the way forward for attaining a more sustainable and inclusive oil industry. It was discovered that corruption is one of the key issues confronting the energy industry, and it must be addressed if the country is to achieve significant progress in terms of security for humans and the environment. The Niger Delta people are still suffering health consequences as a result of the oil leak, and the ecosystem continues to deteriorate. This thesis underlines the urgency of having a reliable government strategy for a more sustainable governance of the region's natural resources.

**Keywords:** Human Security, Environmental Security, Natural Resource Governance, Crude Oil, Niger Delta

## Öz

### **Nijer Delta Bölgesinde Yaşanan Petrol Üretimi Kaynaklı Ekolojik Krizler Karşısında Devletin Yaklaşımı: İnsan ve Çevre Güvenliği Perspektifi**

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**Ağustos, 2021, 67 sayfa**

Nijerya Hükümeti petrol üretiminden elde ettiği gelirleri kontrol etmekte ve ülke geneline dağıtmaktadır. Ancak bu durum kirlenmiş su yatakları, su kaynakları ve ormanlar yaratmıştır. Bu çalışmanın amacı petrol üretiminin insan ve çevre güvenliği üzerindeki etkisini anlamaktır. Tez aynı zamanda bu tehditlerin devlet ölçeğinde, enerji politikaları bağlamında, ne ölçüde önleyici devlet politikaları ile kontrol altına alınabileceğini tartışmaktadır. Bu çalışma nitel bir çalışmadır. Tezin verileri dergiler, makaleler, resmi web sayfaları gibi ikincil kaynaklar kullanılarak elde edilmiştir. Veri analizi mevcut yasalar, regülasyonlar, mevzuatlar, ve konu ile ilgili devlet organları üzerinden yapılmıştır. Mevcut mevzuatların daha sürdürülebilir ve kapsayıcı bir petrol endüstrisi yaratabilmesi adına yapılması gerekenler tartışılmıştır. Enerji ile ilgili yozlaşmanın en büyük engel olduğu ortaya konmuş, enerji üretiminin insan ve çevre güvenliği gözetilerek devam ettirilmesinin öneminin altı çizilmiştir. Nijer Delta bölgesinde yaşayan insanlar petrol sızıntısı, ve ekosistemin tahribatı nedeniyle önemli sağlık problemleri yaşamaktadırlar. Bu tez buna benzer sorunların giderilebilmesi adına biran evvel güvenilebilir devlet stratejilerinin hayata geçirilmesi gerektiği yönünde görüş ortaya koymaktadır. Bölgenin doğal kaynaklarının daha sürdürülebilir şekilde yönetimi ancak bu şekilde mümkün olacaktır.

*Anahtar Sözcükler:* İnsani Güvenliği, Çevresel Güvenlik, Doğal Kaynakların Yönetimi, Ham Petrol, Nijer Delta.

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### **List of Abbreviations**

AES	Applied Energy Services
BCF	Billion Cubic Feet
ES	Environmental Security
GDP	Gross Domestic Product
HDR	Human Development Report
IMF	International Monetary Funds
INET	Investment in Higher Energy Technology
IOC	International Oil Companies
JVAs	Joint Venture Agreements
MNOC	Multinational Oil Companies
MMST	Millions of Tons
NOSDRA	National Oil Spill Detection and Response Agency
NOSCP	National Oil Spill Contingency Plan
OPEC	Organization of Petroleum Exporting Countries
PHCN	Power Holding Company of Nigeria
SCF	Standard Cubic Feet
TOC	Transnational Oil Companies
U.S	United States

## CHAPTER I

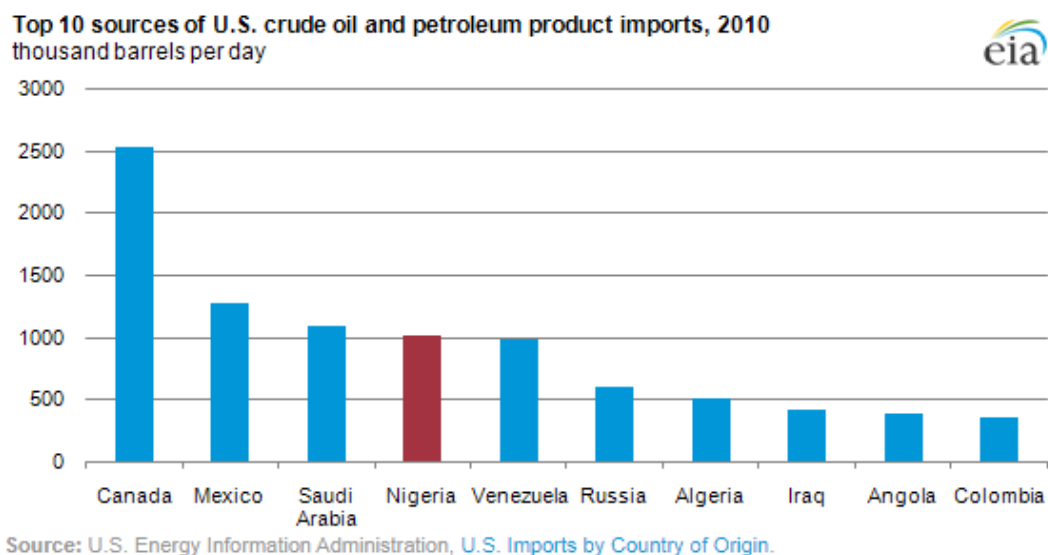
### Introduction

Niger Delta comprises a number of historical city states, notably Benin and Oyo. Additionally, there are a number of places in the Niger Delta that were formerly ruled by other ethnic groups. A small group of Europeans arrived in the 15th century, bringing with them trade in slaves, textiles, and spices. The British dominance over the Niger Delta which led to an increase in palm oil exports in the 19th century as a result of the industrial revolution. Oloibiri (now Bayelsa State) was discovered in 1956 and the country was split into regional administrations based on ethnicity and religious affiliation and these factors have resulted in heightened conflicts over the distribution of resources. In the region, the availability of oil and gas deposits has created the resource curse or paradox of plenty, which perpetuates this inequity. It's a mix of natural resource riches and inadequate governance that enables political and other power holders to gain disproportionately from oil money, as well as allowing the oil and gas sector to be in operation way below the given international standards. There have been several oil spills in the past that have not been cleaned up, and this has had a negative impact on local health and livelihoods: farms and fishing waterways are poisoned (Babatunde, 2020).

Corrupt politicians at all levels are often unable to answer for their actions in front of their constituents as a result of corruption (Babatunde, 2020). Though insurgency has subsided, there is still daily insecurity in the Niger Delta due to cults, pirates, and corrupt security officers, as well as economic instability. In addition, international politics and interests have an impact on the situation. In Nigeria, foreign investors' interests might take precedence over the country's population because of the global need for oil. Due to Nigeria's inadequate standards monitoring and enforcement, companies may simply take advantage of the situation, as in the case of filthy fuels imported from Europe and others. It is with this issue that this study investigates human security and environmental security in the Niger Delta region in terms of the state responses to ecological crisis that are resulted from oil production in the region.

Nigeria is Africa's most populous country, and it is recognized for being a major crude oil supplier to the United States, India, Brazil, Spain, and France, with millions of barrels produced every day (Olayungbo & Olayemi, 2018). Nigeria's gas resources are

as huge, with 184 trillion cubic feet of confirmed natural gas reserves, making it the world's seventh-largest gas reserve (Olayungbo & Olayemi, 2018). Oil and gas export profits make for 95% of the country's export earnings, which account for 40% of its GDP (McPherson, 2004). Because of Nigeria's reliance on the oil trade, any instability in exports poses a serious danger to the country's economy. Niger Delta encompasses roughly 7.5% of Nigeria's territory and has a population of 6 states, namely Akwa Ibom, Bayelsa, Cross-River, Edo, Delta and Rivers (Odupitan, 2017). This area is rich both in natural resources that are renewable and non-renewable and accounts for an important part of Nigeria's oil and gas reserves (Olayungbo & Olayemi, 2018). Niger Delta is the biggest wetland in Africa with incredibly diverse ecosystems which include mangrove, lowland rainforest freshwater forest and aquatic ecosystem which accommodates different types of flora and wildlife (Uzoma & Mgbemena, 2015). Fish (both fin and shelled fish) as well as aquatic mammals, reptiles, amphibians, and other species live in the aquatic ecosystem. As a result, aquatic insects, snails, freshwater shrimp, snakes, and fishes such as catfish may be found in most static freshwater resources, as well as algal blooms, water lilies, water hyacinths, Freshwater ecosystems have a variety of fish and macrophytes that may be found in moving water bodies such as rivers. Sharks, whales, and dolphins are just a few of the creatures present in marine environments. The Nigerian government controls revenues from oil production and distributes it around the country during the decades leading to polluted waterways, streams and forests, which are the main source of income for the majority of the rural population, mainly based on ecosystem services, and also part of this unequal resource distribution.



**Figure 1** Sources of U.S crude oil (U.S Energy Information Administration, 2011)

Nigeria's petroleum sector was devastated by attacks of separatist rebels claiming a greater share of the country's oil revenue in the first half of 2006. The guerrillas are mostly from Nigeria's Ijaw ethnic group, and they live in the Niger Delta part of the country, where the bulk of the country's oil supplies are mined (Babatunde, 2012). Given the importance of energy exports in the Nigerian economy, as well as the causes of the current crisis and the government's inability to stabilize the attacks on energy facilities in the delta region became common, it gets apparent that Africa's largest oil producer will continue to be irritated. Several millions of barrels are exported daily from Nigeria and this is expected to continue as far as the upcoming decades. State bodies struggle with predators such as guerrillas and private armies due to a lack of governmental presence in tax collection and inadequate knowledge about what is going on at the grassroots level. When oil money was not distributed fairly, it often resulted in ethnic strife. The problem of oil spills also has devastating effects on the countries in the oil sector. There are over 7000 accidents recorded over a 50-year period and oil has been attributed to pipeline corrosion, inadequate infrastructure maintenance, spills or leaks during refinery refining, human error, and deliberate acts of vandalism or oil theft (Duru,2014). Exploration and extraction of oil is a profitable business in Nigeria and a big source of income. However, it creates pollution threats that, like most manufacturing processes, are sluggish poisons, taking months or years to cause illness and death (Nriagu et al., 2016). From a human security perspective,

Nigeria's oil-rich Niger Delta area offers an illustrative setting for studying health risk contact for individuals.

Issues have been raised regarding the consequences of offshore oil and gas operations as some populations are facing alarming environmental destruction, posing major, and sometimes large-scale, health threats and as a result, mitigating the threats associated with environmental pollution is a top concern for health officials. Soil productivity has decreased because of the spills and has suffocated economic trees and food crops, crushing them or reducing their harvest, resulting in a 60% drop in household food security (Chinedu & Chukwuemeka, 2018). Economic trees in Nigeria are trees that serve as sources of food and fibre, lumber, animal feed, stakes, fuel, and soil fertility restorers. Another big cause of environmental pollution arises from oil drilling operations as gas flaring, which poses a significant health danger. The link between energy production, human security and environmental security cannot be underestimated and that is why it is essential to point out the consequences of insecurities of the region. This study investigates the crude oil production in the Niger Delta region of Nigeria by examining both the human and environmental security of the area. The study will explore the organizations/bodies responsible for responding to the crude oil production crisis in the Niger Delta region and the efforts that have been made to respond to the human and environmental insecurities in the region.

### **Statement of the Problem**

Crude oil production has been explored and exploited including the health dangers associated with the production activity. The Nigerian government does not pay enough attention on the matter, rather the industry is embraced only as a booming source of income in Nigeria (Ordinioha & Brisibe, 2013). However, it is very clear that the health hazards of oil production contribute to the disease burden of communities that produce oil. A common concern in oil production is the oil spill as there is an average of 140 spills annually in the Niger Delta (Lindén & Pålsson, 2013). Oil spills are dangerous to human health, they do not embrace human security and they are also dangerous to the environment. The health consequences can take a bit of time before presenting the symptoms; it can even take years for the health conditions to deteriorate for some people before the symptoms are evident. Some respiratory issues that are attributed to exposure to oil spills and the heat evaporating from the oil spills include;



lung disease and bronchitis. It can also lead to other conditions related to skin diseases. It is the responsibility of the federal government to take actions to respond to oil spills pursuant to the respective bodies. The Ministry of Environment founded National Oil Spill Detection and Response Agency (NOSDRA) in 2004 to administer the National Oil Spill Contingency Plan (NOSCP) in accordance with the International Convention on Oil Pollution. The Oil Pollution Act of 1990 also gives the government and industry advice on pollution control, reduction, clean-up, and responsibility for pursuing oil spill reports. This study gives an insight into crude oil spills in the Niger Delta region of Nigeria. The purpose of this study is to identify the impact of oil production on human and environmental security and to explore the extent to which these threats are translated into preventive policies while drafting energy policy strategies of the country.

### **Aim of the study**

Issues have been raised regarding the consequences of offshore oil and gas operations as some populations are facing alarming environmental destruction, posing major, and sometimes large-scale, health threats and as a result, mitigating the threats associated with environmental pollution is a top concern for health officials. A research goal is a single sentence that outlines what is intended to be accomplished at the end of the research project. The aim of this research is to lay down state responses to ecological crisis resulted from oil production in the Niger Delta region from a human and environmental security perspective.

### **Research Questions**

The following research questions will be answered in this study:

1. What ecological and health related consequences does the crude oil industry have in Niger Delta region?
2. Which state organs/bodies/governmental institutions are responsible to monitor/control/respond to ecological and health related crises in the region and to what extent do the state organs/bodies/, governmental institutions respond to these crises?
3. How can a more sustainable and inclusive oil industry be instituted?

## **Methodology**

To locate, select, process, and evaluate information on a topic using specified methods or techniques is called research methodology. On the other hand, the methodology part of a research report provides for critical evaluation of the validity and reliability of a study.

## **Research Design**

This study is a qualitative study and descriptive in nature.

## **Research Method**

Niger Delta was considered as a case study. A case study in research aims to study specific difficulties within the confines of a particular setting, scenario. Case study of human security and environmental security was considered for this study.

## **Data Collection**

To understand ideas, thoughts, or perspectives, qualitative analysis includes gathering and processing non-numerical data (e.g., text, video, or audio). It may be used to gain in-depth understanding of a topic or to develop new research ideas. In this case, data was collected from secondary sources such as; journals, articles, international journals, international newspapers, local newspapers, online library, health organizations websites, the Nigerian Bureau of statistics web page and Niger Delta websites.

## **Data Analysis**

Thematic analysis was done on the secondary data obtained. Researchers may measure and interpret the existence, definitions and associations of certain phrases, themes or ideas by using content analysis. The thesis focuses on the analysis of existing laws/regulations/directives, state bodies responsible for the governance of the oil resources of the Niger Delta region and the way forward to attaining a more sustainable and inclusive oil industry. The concepts that were considered while gathering data for this study include: health investigations on reports; consequences on human health/human security and environmental health.

## **Timeline**

This research has been completed in 6 months.

## **Limitations of the Study**

The limitations of the study include; limited time for the completion of the program as well the fact that there are few researches that have been done prior to this research. This research solely focused on previous research done in relation to the topic and the information for this study was limited to those researches giving that they are few. Time is a limiting factor and this research had a limiting expected time of completion which had to be met in accordance to the educational institution requirements.

## **Thesis Structure**

In the Introduction part of the thesis, the link between energy production, human security and environmental security is stated as they cannot be underestimated and that is why they are essential to point out the consequences of varieties of insecurities; including human health and the environment. This study investigates the crude oil production in the Niger Delta region of Nigeria by examining both the human and environmental security of this region. Introduction then moves on to introduce the research topic by giving a background of Nigeria, focusing on the Oil producing region known as the Niger Delta Region of the country. The concepts of energy security, human security, and environmental security and the concerns surrounding oil spillage are also mentioned in this chapter. In Chapter One, this thesis includes an examination of literature on the previous studies focused on the oil production and exploitation in Nigeria, in the Niger Delta region as well as the theoretical framework on human security. In Chapter Two, the socio-ecological and health related consequences is analysed. The benefits of oil exploration and exploitation in Niger Delta, the consequences of oil exploration and exploitation in Niger Delta and health consequences of Crude Oil on Human Security were all explored in this chapter. Chapter Three includes data from previous researches while exploring the dimension of governance of natural resource in the region. The research questions of existing laws/regulations/directives and state bodies responsible for oil resources governance in Niger Delta as well as the context in which the state organs/bodies/, governmental institutions respond to these crises are answered in this chapter. The issue of corruption

in the oil exploration process in the Niger Delta Region, Government's Limitations and shortcomings in efforts to minimize Pollution in the Niger Delta were also discussed. The aim of this chapter is to answer the first and second research questions. The fourth chapter explains the way forward to attain human and environmental security in the Niger Delta region; this chapter answers the third and last research question. The Conclusion part of the thesis summarizes the result of the research, adds the limitations and recommendations/suggestions.

## CHAPTER II

### Literature Review

#### Theoretical/Conceptual Background of the Study Human and Environmental Security-A Conceptual Discussion

Security is a state of mind in which a person feels protected against damage by others and although objective variables in the feeling of security are required, they are not enough. Subjective variables affect perceptions of security (Muguruza, 2007). "The need for survival raises a security problem because of the anarchical character of international interactions." The preservation of the environment also includes protection against irreversible degradations, such as. acid rains, desertification, and destruction of forests, ozone pollution and global warming. Two conceptual lines on environmental and human security were developed among the scientific community and international institutions (Elliott, 2015). The first focuses on the environmental factor of safety, and the second on the examination of human beings.

A comprehensive checklist of modern environmental issues is available, covering various types of air and water contamination, habitation loss, deforestation, desertification, biodiversity loss and individual species risk, ozone depletion and land and marine architecture destabilization and deterioration. People are more vulnerable to resource scarcity, sickness and the burden of their health, loss of livelihood owing the decline in the capacity to carry out agricultural and fisheries operations, food insecurity (sometimes genuine malnutrition and hunger) as well as catastrophes of nature (Elliott, 2015). Poverty, which is often a result of environmental deterioration, exacerbates these challenges: unlike the rich, the poor typically lack access to alternative services.

The 1994 Human Development Report (HDR) was not novel in its suggestions on connections between environmental deterioration and human security. At least two reports of the Brandt Commission: A Survival Program released in the 1980s and common crisis are features in the genealogy of the human security idea (1983). The HDR 1993 paved the way for a focus on human safety and its environmental aspects. This is a record of human frailty and of their coercion to share a fragile planet's existence (environmental deterioration). The HDR, which perceived human security in its concept as a universal, integrated, personal concern for 'human dignity' and as an

alternative to traditional perspectives on security that had too long been influenced by conflict-potential dangers on the frontiers of the country, enhanced this approach.

Some believe that the idea of human safety shows that securities are as linked as they are between persons (Chandler, 2008). Contrary to the risk to frontiers, human security aims to take account of ways in which even when human lives do not exist, they are made unclear and uncertain. In spite of the emphasis on a fundamentally transformational approach to safety, the Environmental Section of the HDR 1994 is rather sparse here.

Human safety methods have a say in efforts to address environmental vulnerabilities, which at the same time increase human security and minimize social violence and conflict potential (Titko & Kurtynets, 2019). More traditional models of protection assume that states would work together to prevent disputes arising out of intra-state resource rivalries and access to environmental services, and trans-boundary concerns like as climate movements (Elliott, 2015). It also urges governments to prepare its military forces for demands on their defence, maintain critical assets and supply lines, and help humanitarian crises or civil conflicts when environmental issues arise. Human security therefore involves a more extensive knowledge of dangers and encompasses insecurity in individual, communal among other things. Human security is an emerging paradigm for analysing global risks whose proponents argue that the ideal reference for security should be at the human level rather than state level. This research considers the investigation as there are various health consequences related to the crude oil exploration and exploitation in the Niger Delta region. Energy security refers to how people are able to access energy which is affordable and reliable and the people in question have to be safe to do that. Their environment/ecosystem, their health, their safety, their earned income, their daily activities should embrace energy security. Human security is primarily comprised of seven concerns. Economic security, food security, health security Personal security, societal security, environmental and political security are all important aspects of security.

## **Nigeria**

In 1884, the British colonized it, and the colony was founded during the Berlin Conference, which divided Africa among European countries. Nigeria was targeted by the British because of its natural resources. The British were interested in items such as palm oil and palm kernels, as well as trading in tin, cotton, cocoa, groundnuts, and palm oil. The colonization was carried out by the British military. Despite considerable indigenous opposition to the British, the British were able to defeat it all. As a result, a trade station on the Niger River is established, and British economic dominance over the colonies is maintained, exploiting Nigerians. Nigeria was founded through British colonization, bringing together many cultures and areas under an abstract, unrecognized governmental entity. British policy inconsistencies fostered cultural animosity by seeking to preserve old practices and still introduce modern technology and institutions of Western administration. The power of the emirs has been maintained in the north by appeals to Muslim authorities, although nationalist attitudes have been strongly anti-Western. Modern nationalists from the south, whose thought was influenced by the European principles, resisted indirect control, which had put into power antiquated governing elite that shut the Nigerian Western elite out. On 1 October 1960, owing to the British parliamentary legislation, Nigeria became independent and, in 1963, a republic became a Commonwealth (Tsereteli, 2018). As a consequence of the status change, the political structure needed not be amended and the president who was elected to the parliament for a five-year mandate succeeded the UK King as Head of State and the Crown as the representative of national supremacy. Nnamdi Azikiwe was the first Republic president and the country has an area of 923.768 sq. km and a surface of 13.000 sq. km (Olusola,2013). In order to address issues concerning common soil and seas borders, Nigeria and Cameroon had bilateral negotiations. In the Gulf of Guinea, Nigeria is 853 kilometres wide. Nigeria is home to a territory of 12-nautical-mile sea, a 200-nautical-mile economic zone, and continental shelf with a depth or depth of 200 meters (Aliyu& Amadu, 2017). The urbanization and industrialization of waste management caused significant air, water and ground pollution. Waste management is also an important issue. Oil leaks, flaring of natural gas, pollution by vehicles, open fuel and dumping of garbage and poorly designed sites all add to the environmental impact. Another major environmental worry is deforestation and depletion of arable land caused by the mining, fires and

overgrazing of animals, and the area of forests has decreased about half since 1990. As highlighted by Mustapha (2006), Nigeria's population comprises of 250 ethnic groupings. The north is dominated by Hausa and Fulani, and the south-western parts are Yoruba, Igbo, and the Niger Delta people are Ijaw. The reason of uncertainty is inter-ethnic antagonism. In a multi-ethnic society, the source of inter-ethnic conflict is "something more hidden, such as economic demands, psychological attitudes, or some internal patterns of the group structure," rather than "the fact of belonging to distinct ethnic groups." Human people in the community are the ones that promote ethnic antagonism." The use to which ethnicity is used is a consequence of the inter-ethnic strife that we have in Nigeria. "Ethnic elites exploit and politicize ethnicity in their different efforts to share the national cake". In the national census since 1991, religion and race have not been important issues. The national language is English. Other frequently spoken languages include Edo and Efik, Fulani, Adamawa Fulfulde, Hausa and Idoma, Igbo and Yoruba. The population of Nigeria is primarily divided between 50% among Muslims and 40% of Christians. In the north the majority is Muslim, while in the south the majority are Christian, the remainder of which is 10% tribal and animistic. In the early 2006 in Nigeria, antichristian demonstrations occurred following publication of the Prophet Muhammad's disparaging cartoons in a Danish journal that prompted anti-Muslim backlash. The riots burnt churches and mosques, caused injuries to numerous persons, and killed more than 100 people. Nigeria's economy is striving to use its massive deposits of fossil fuel, which effect more than 57 percent of the people, to alleviate the severe poverty in the nation (Oyedepo,2012). Economists call the "paradox of abundance" or the "curse of oil," as economists term the cohabitation in emerging nations like Nigeria of immense natural resources and acute human poverty. Thanks to exports of oil and natural gas at high prices, Nigeria was able to record trade in products and current account surpluses in recent years. Reports indicate that 80% of Nigerian energy sales go to the state, 16% to finance running expenditures and 4% to developers. However, 80% of oil revenues sustain only 1% of the people because of corruption, according to the World Bank (Oyedepo,2012).

Nigeria still wants to increase its exports but OPEC is urging it not to achieve its 2.3-million-barrel limit per day. The continuing flow of Nigerian oil exports in February 2006 was hindered by the attacks on oil exploration and by the abduction by separatists



on the oil earnings in Nigeria's society (Oyedepo, 2012). Harm to one of the export terminals of Royal Dutch Shell really caused Nigeria's oil exportations to decrease by 25 percent. This reduction continued in 2008, as the war worsened, and many international oil employees evacuated the region. In January 2008, the Youth Council of Ijaw, which represents an ethnic group of Ijaw, stated its support to the activists. In addition to the concerns of OPEC about the attempts of Nigeria to raise demand, such on-going violence may be another obstacle. It is believed that natural gas stocks are 182 trillion cubic feet and are the sixth biggest in the world as well as Africa's largest and generated 791 billion cubic feet of natural gas (bcf) by 2005, exporting 425 bcf (Gboyega et al., 2011), 209 million tons of viable coal reserves are available (mmst) (Gboyega et al., 2011). In 2004 Nigeria produced just 0.02 mm, all of them domestically consumed. In Nigeria, there is inadequate manufacturing and excessive freight costs in the coal business (Chukwu et al., 2015). The government intends a rural electrification project to extend connection to 85% of Nigeria by 2010, but just 40% of the population gets power (Oyedepo,2012). In 2005, Nigeria provided 23 billion kilowatt-hours of power, more than enough to satisfy 17 billion kilowatt-hours of domestic demand (Rapu et al., 2015). The electricity network in Nigeria is significantly below 5,900 megawatt and power disruptions are common (Rapu et al., 2015). Foreign electrical companies are urging independent power plants to meet the demand for energy.

Nigeria's global peace index position remains relatively small and Nigeria has spent a little amount of military money and Nigeria is the largest oil exporter in Africa. Although the largest producer of crude oil is in Africa, the production of crude oil and natural gas is limited by disruptions in supply. Nigeria's economy depends primarily on oil sales, with major effects on swings in crude oil prices. Nigeria's crude oil and natural gas exports in 2018 were \$55 billion, up by 23 billion from 2016, according to the International Monetary Fund (IMF) (Gboyega et al., 2011). A rise in export sales, partly due to the rebound of crude oil prices, has helped to improve Nigeria's economic predicament (Odupitan, 2017). However, Nigeria's fiscal deficit remained steady at 4 percent of GDP in spite of reforms in the taxation administration, due to a significant surge in capital and the weaker than projected recovery of non-oil revenues. The Nigerian economy remains strongly dependent on the earnings from crude oil and gas;

the GDP of non-oil earnings represents just 3,4 percent, which is among the lowest in the world.

### **Energy Security in Nigeria**

Among Nigeria's energy security concerns are disruptions in supply, the availability and affordability of power, the volatility of crude oil prices, and Nigeria's energy insecurity is unjustified, given the country is endowed with vast energy resources. Most of Nigeria's economic activities are based on petroleum, gas and energy which are limited and ecologically favourable (Oyedepo, 2012). The nation's electricity stability is not guaranteed by exclusive reliance on a single energy source (Owusu & Asumadu-Sarkodie, 2016). Energy security requires the supply of a wide range of energy supplies in sufficient amounts and at reasonable rates, as well as policies that promote industrial development, aid in poverty alleviation, are environmentally friendly, and take into account shocks and disturbances. Energy stability is defined, according to the 1999 UNDP research, as the continued availability of energy in different forms at acceptable costs in sufficient quantities (Fatona et al., 2013). Consequently, energy stability includes not just enough energy reserves or potential, but also availability, accessibility and cost-effectiveness. Nigeria has sufficient energy capacity to meet current and future growth requirements. The country has the sixth greatest resources in the world for crude oil. Nigeria abounds in firewood and other natural resources like gas. Energy security is not a new concept among Nigerian leaders; but the sense of reason, dedication and determination is not evident. In the run-up to the 1978 conference on energy policies, President Olusegun Obasanjo, the former Military Head of State said "the energy has now come to mind, in all its effects, as a crucial aspect in this inevitable period of economic development and industrialization"(Kojima, 2013). Energy Security in Nigeria has been exposed to several challenges, from corruption to domestic and external security challenges, both having an enormous influence on the nation's economy. Saboteurs, political opponents, and jihadists utilize vandals, kidnaps, labour unions, and gangs in the oil and gas sector to sabotage the energy market and create energy instability, since oil and gas are regarded as the economic lifeline of the nation. Cartels also manipulate prices in Nigeria through artificial supply limits and dominate the downstream oil and gas industry (Ralby, 2017). These cartels decide on the import quantity and the percentage

to be granted, which scares the market artificially. The behaviour of Vandals has put the electrical market at risk.

### **Energy Security Dilemma in Nigeria**

Nigeria has extensive potential to deliver significant oil and natural gas supplies and has a big role in the global energy production; yet, due to internal problems, Nigeria has little capability to use its natural capital (Oyedepo,2012). With sectarian insurgencies in Borno State, widespread government corruption, lack of energy and social infrastructure, and absence of financial incentives for international investors to work, huge oil resources continue to be underused, and national stability continues to worsen (Moumouni et al.,2014). Nigeria has struggled to import refined petroleum products for the crucial energy requirements, while having the sixth greatest production of oil in the world and Africa's greatest output, showing an in-efficiency in the face of massive waste rockets. Nigerian energy security covers illegal trafficking of hydrocarbons, which supplies Nigerian peasants with the oil they need for daily living since corruption, starvation and unemployment are still rampant among the young Nigerians. Nigeria's energy and competitiveness is aggravated by the direct targeting by militias of oil pipelines, the recurring electrical system outages, and the aging oil refineries. The government must overcome social, policy, security, and financial disturbances that are impeding Nigerian output and growth in order to properly use its energy resources and strengthen the Nigerian economy (Obi & Rustad, 2011). As also stated above, Nigeria has known with its total oil reserves of 32,7 billion barrels, making it Africa's largest producer. Nigeria also possesses a natural gas base of 165 trillion cubic feet, including an unrelated gas of 75.4 trillion cubic feet. To underline this again, it should be mentioned that Nigeria contributes to the 70 percent of western African energy according to Mele Kyari, Group Managing Director of the Nigerian National Petroleum Corp. Nigeria, however - due to a lack of supplies and security issues in the region - remains in struggle to deliver electricity to the global market. Nigeria started its oil production by 5,100 barrels per day in 1956, with Nigeria progressively gaining oil capacity since its entry into OPEC in 1971, as the energy infrastructure has continued to improve (Odupitan, 2017).

The importance of Nigeria's energy sector is tied to a growing population, the development of auto manufacturing and increased demand and supply for agriculture.

According to the United Nations study, by 2050, Nigeria will be the third most populous nation in the world to take over as a US; thus, Nigeria must address its political and social difficulties, such as corruption and sectarianism. Nigeria's energy supply for domestic use includes private investments, firms and firms in oil and gas, power grids, hydropower and thermal resources (Omoriegbe,2019). While Nigeria's energy supplies have risen to meet local and global demand, it is seriously undermined by sectarian conflicts as it is able to sustain high levels of oil production, to offer infrastructure development funding and to implement structural changes. In particular, the Niger Delta is an essential power source of this country, since 1956, and continues to jeopardize the energy stability of Nigeria's aggressive insurgents, illicit and hydrocarbon trade. In 2019, 416 violent episodes culminated in over 1,000 murders due to major increase in the number of organized criminal unions, racial conflicts, government corruption, and cult (Gboyega et al., 2011). In the Niger Delta, militant organizations have a significant impact on Nigerian oil production. The energy information agency mentioned that since the amnesty program ended, this impact continued to increase as training and jobs are being provided for activists in exchange for the abandon of weapons, and promising that the attacks against Nigerian oil and gas pipelines will be stopped.

### **Sustainable Crude Oil Production Dilemma in Nigeria**

The rise of the global demand for oil and natural gas brings about adequate constructive and corrective environmental protection measures which are required to achieve a sustainable society (Abubakar,2014). Nigeria, which is currently the eighth largest oil producing country in the Organization of Petroleum Exporting Countries (OPEC), has suffered and continues to suffer from environmental destruction and deterioration. The first oil company in Nigeria to start commercial manufacturing in 1958 was Shell D'Arcy. A second refinery, with a capacity of 150,000 barrels per day, is located in Port Harcourt. As of 2009, the oil industry is expected to account for 95 percent of Nigeria's export earnings and 85 percent of the government's revenues, according to the World Bank. The bulk of the reserves are housed in the Niger Delta, offshore Benin, the Gulf of Guinea and Bonny. Nigeria's crude oil production in 2008 amounted to an average of 1.94 million barrels a day, making them the largest producer of Africa's crude oil (Country Analysis Brief, 2009). Exploration and extraction of oil is a profitable business in Nigeria and a big source of income. However, it creates

chemical contaminants that are "late poisons," meaning they take months or years to cause illness and death, as with other manufacturing practices. This is in contrast to microorganism pollution of water, food, and the atmosphere, which causes illness almost instantly (Ordinioha & Brisibe, 2013). Scholars and researchers in the Niger Delta have recently taken up the topic of environmental control of oil and gas exploration and development. There has been a lot of unaccounted for environmental destruction in the past, especially in the tropics (Africa), some developing economies, and some developed countries. It is clear that little or nothing is being done to mitigate the effects of environmental pollution in that connection (Kalu, 2017).

### **Oil Spillage in the Niger Delta Region**

Chemical spills are a worldwide problem since the industrial revolution founded shale oil. It is estimated that the annually spilling of around 0,7 to 1,7 million tons of gasoline into lakes, streams and waterways as a result of human activity. Osuagwu & Olaifa (2018) mentioned that gas is transported by pipelines in refineries for the purpose of oil discovery and corroded or rusted pipes are the most common source of oil leakage. Crops, fish dams, commercial forests, farmlands, and habitat are all destroyed as a result of the spillage. Every week, on average, one oil spill occurs in the Niger Delta region, causing severe environmental harm (Alam et al., 2010). Since 1958, there have been many accounts of oil spills in Nigeria, owing to pipeline and tanker corrosion, vandalism, oil processing activities, and insufficient or non-functional production equipment (Alam et al., 2010; Watts & Zalik, 2020). While the number of oil spills has decreased in recent years, the number of spills has risen, 19 implying that the condition has not improved significantly. The incidence of minor-moderate leaks in small communities on a regular basis result in major pollution of waterways, creeks, and agriculture. The majority of Niger Delta residents come from ethnic groupings in the region. The political economy of the oil sector has affected their lives for years. Repeated oil spills have wreaked havoc on the environment, wreaking havoc on people lives and livelihoods. The Nigerian government lacks a well-thought-out plan for dealing with the Niger Delta's complex, multifaceted insecurity. It is suggested that the Nigerian government decentralize its security institutions and address the region's development issues to resolve this.



**Figure 2** Factors that can be mitigated in the Niger Delta, Nigeria (Macaulay et al.,2018)

### **Impact of Oil Spillage on Human and Environmental Security**

Spilled oil endangers both freshwater and coastal ecosystems. It has an effect on surface resources as well as a diverse variety of subsurface species, all of which are interconnected in a dynamic food chain that includes human food sources (Mba et al., 2019). Spilled oil can affect the environment in a variety of ways, including physical damages that actually affect animals and their environments (such as painting birds or rodents in oil), as well as the oil's toxicity, which can poison exposed species (Saadoun, 2015). The flaring heat destroys vegetations around the flaring area, ruins mangrove swamps and salt pond, prevents plants from growing and blooming, causes soil erosion and reduces agricultural production (Twum,2019). The gas flare is connected to the petroleum spills and Nigeria flares 75% more of its gas than any other country on the earth as per the United Nations Development Program (UNDP). Poverty, food shortages, malnutrition, inadequate sanitation, and health issues plague populations affected by the disaster. Another issue in the Niger Delta region is acid rain, which is exacerbated by gas flaring and has resulted in habitat loss as well as the destruction of land and economic crops (Otu & Oloidi, 2018).



**Figure 3** A gas flare in the Niger delta (Ordinioha & Brisibe, 2013)

The prevalence of grass and bushes in particular parts of the nation shows the decrease of natural vegetation that can be caused by acid rain or other reasons, such as agricultural operations and the discovery and exploitation of oil companies. In rainfall the concentrations of acid in the Niger Delta region tend to be high and decrease as you go farther south.

### **Human Security: Human Perspective**

For many people, the world today is an unstable, dangerous environment on many fronts. Long crises, brutal conflicts, natural disasters, chronic poverty, illnesses and economic downturns are causing people to suffer and jeopardizing peace, stability and long-term development opportunities. These problems, involving a number of human anxieties, are difficult. They may spread massively when they collide, devastating entire communities and crossing national boundaries. A tried-and-tested analytical and planning framework is a human-security strategy which allows the United Nations to act more fully and effectively by separating sectors, providing contextual solutions and establishing partnerships for a society free of fear, need and indignity. Most of the development and humanitarian concerns of today originate from a number of interlinked and reinforcing causes. These demand more integration of the operations

throughout and in conjunction with the UN system (Ney et al., 2012). Acting on specific concerns is not enough for those in crisis and extreme poverty. Insecurities need to be addressed jointly and thoroughly. Only then can people begin to feel safe, have money and opportunity to be well-being in all parts of their lives and know that their rights and dignity are completely recognized. Only then will human security be guaranteed an enhanced, durable response to peace and development's most onerous deficiencies. The human security approach may assist Member States' support to improve resilience to climate change and natural catastrophes by the United Nations; promote peaceful and inclusive communities; address the main causes of chronic poverty. As a result, the use of the approach to human security may greatly strengthen the efforts of the United Nations and its partners to fully achieve the transformative potential of Agenda 2030(SDGs) (Leal Filho et al., 2019). Agenda 2030 stresses that, an integrated sustainable development agenda calls for an equally synergistic implementation framework and an inclusive and people-cantered, genuinely sustainable development agenda. Against the background of the approach to human security, Agenda 2030 asks for development policies to lead to more resilient societies where people are secure from chronic dangers including poverty abuse, starvation, illnesses, violence and repression. Briefly, the attitude to human safety is an essential element for sustainable development (Wählisch, 2014). The 'human components' of security, rights and development are linked in human security. As such, the following features are shown in an interdisciplinary concept:

- people-cantered
- multi-sectoral
- comprehensive
- context-specific
- prevention-oriented

As a concept focused on individuals, the individual is put at the centre of examination by human security and it therefore evaluates a broad variety of situations that endanger survival, livelihood, and dignity and determines the underlying thresholds of intolerable threats to human existence (Brauch,2005). Human safety is also dependent on multi-sectoral insecurity awareness. Human security therefore involves a more



extensive knowledge of dangers and encompasses insecurity in economic, food, health, environmental, individual, communal and political security, among other things concerned with human security is protecting and expanding people's vital liberties. It needs both the protection of people from significant and pervasive risks and the empowerment of individuals to take control of their own lives. Human security is a human right and it acknowledges that feeling safe has several aspects, including being free from fear, from want, and from indignity.

### **Environmental Degradation (Environmental Insecurity)**

In spite of the government's efforts to minimize gas flaring by 2008 and the presence of inspection agencies, legislation and rules, oil production and operations activities such as these have substantially impacted the Niger Delta region's ecotourism (Olujobi & Olujobi, 2020). The consequences of shifting agriculture on fragile soils, forest clearing in erosion-prone and flood-prone areas, and poor construction and maintenance of roads and irrigation systems in Nigeria, as in many other developing countries, are numerous: aggravated soil erosion, flood disasters, salinization or alkalization, and desertification due to the effects of shifting agriculture on fragile soils are some of them (Olagunju, 2015). Environmental degradation may also be defined as a natural-environmental hazard by lowering biological diversity and overall environmental health (Zari, 2014). It involves the progressive emissions of air, water and the earth, over-exploitation or deterioration, among other natural resources. Resource depletion can be caused by natural catastrophes or ecological stresses and human exploitation like misuse and pollution (Zari, 2014). Human actions hasten the deterioration of the climate. This occurrence poses a significant danger to the human race's continued presence on this planet. The loss of resources such as air, water, and land, as well as the disruption of forests and the disappearance of animals, are all examples of environmental degradation. Environmental degradation is described as the loss of value or harm to the environment (Andrady et al., 2017). Pollution is a global problem that is poisoning the world's oceans. The results of coastal erosion can be seen also in remote areas. Hazardous material has been released into the natural world in some areas (Ferronato & Torretta, 2019). Significant incidents, such as oil leaks, have wreaked havoc on the atmosphere in other countries.

Other factors that contribute to environmental deterioration include: Solid waste has been the country's most important environmental issue, resulting in contamination of water, air, and soil, as well as threats to women's health and social well-being (Ferronato & Torretta, 2019). The time of the oil boom created floodgates for large scale trash creation with its high consumption rate and population. This reduces roadways to small roads and results in frequent congestion and the development of unpleasant smells in the state of Lagos for example. Excessive waste treatment is also connected to a number of illnesses such as cholera, yawning and measles.

### **Oil Pollution**

The Niger Delta generates Nigeria's oil and gas for the great majority. While the Nigerian economy receives billions of dollars in this, the effects for people and biodiversity are severe. Oil facilities and operations are placed in major natural areas such as vital fishing grounds, mangroves and rainforests (Chinedu & Chukwuemeka, 2018). Oil pollution also damages these ecosystems greatly. People get sick from polluted drinking water, and as a result of their incapacity to plant the soil farmers lose money. Nigeria flares more gas on the earth than any other country. The smoke released can injure those who reside nearby a flare. Flares affect their livelihood and risk preterm mortality, new-born respiratory illness, asthma and cancer Flares have a detrimental influence (Abdulkareem et al., 2012). A significant cause of trash, disease and economic devastation to the residents of the region is leaking pipelines in the Niger Delta via cities, areas, streams and rivers. The petroleum poured farms have scarcely been repaired and livelihoods have been lost. Oil polluted seafood ill people and the decline of fish populations cause further economic harm. The spillages in the Delta are common. They are seldom handled promptly. Minor leaks often remain neglected for months, leading to substantial emissions. In certain instances, the nearby residents' ground water intake gets contaminated. Women's respiratory and chromosome disruption is caused by a chemical compound found in industrially contaminated environments and it results in stillbirths and cancer in women. Women use dirty washing water and washing water and as other economic activities in oil-contaminated areas. Moreover, in several ways, including agrarian devastation, the oil company impacts women's socioeconomic lives. There is also the issue of excessive heat from gas emissions and pollution generated by natural gas flame retardation.

## **Ozone Layer Depletion**

The ozone layer is mostly located between 20 and 30 kilometres above sea level. The ozone layer acts as a shield, preventing dangerous ultraviolet radiation from penetrating the atmosphere (Bais et al., 2018). The destruction of the ozone layer occurs as a result of contamination of the atmosphere caused by the emission of chlorofluorocarbons (CFCS) gases, resulting in environmental deterioration.

## **Previous Related Researches**

Among the scholarship exploring the situation of oil production in the Niger Delta Region, Adekola et al (2017) examined how the health risk of oil production in the Niger Delta region is communicated with the government and it was revealed that there is need for improvement regarding that. Also, Faga & Uchechukwu (2019) investigated the condition of the Niger Delta environment and the people residing in the area to determine if environmental security was being put into consideration. It was suggested that new ways should be created in order to enforce intergenerational rights and ensure environmental justice and equity in the Niger Delta region. Another study by Kadafa (2012) explained that oil spillage didn't just start today and has been ongoing for decades over time. The result of the oil spillage has been stream, rivers and forest that have been contaminated. This has been challenging for the residents of the region that had to earn a living with the help of the ecosystem services. It was discovered that up to millions of tons get spilled in the region with decades of which most times do not get completely cleaned (Chinedu & Chukwuemeka, 2018; Osuagwu & Olaifa, 2018). The Niger Delta area of Nigeria saw a broad scale of violent conflict between government, multinational petroleum companies (MNCs) and terrorist groups before August 2009. This dispute has been caused to the terrible human security that has prevented indigenous people in the region from accessing polluted livelihoods (Ajala,2016). The following violent war in the Niger Delta area of Nigeria, which severely affected human safety, has resulted in numerous elements that have led to a lack of growth. Avidity, (Collier &Hoeffler, 2005), (Homer-Dixon, 2010) predatory governments (Englman & Sokoloff, 2018) and pre-bendalism are some of the best documented factors of the latter. Despite the region's importance for Nigeria's economy, intermittent violent actions have rendered this region unpredictable.

Moreover, there has been little success in various attempts to improve its environmental condition and human safety (Nathan, 2010; Enu & Ugwu, 2011).

According to Ordinioha & Brisibe (2013), crude oil spills are more prevalent which impacts on human health causing diarrhoea, cough and occupational injuries. In filthy rivers and rivers, they had to drink and bathe. In particular because of the great volatility of the oil, the problem is compounded by contamination of the precipitation by oil waste. Crude oil in Nigeria was described as 'extremely light.' Ordinioha & Sawyer's (2008) study revealed that a big crude oil leak in the Niger Delta can lead to a 60% decline in food security for homes and a substantial rise in the incidence of low weight and waste in less than five kids. Obi (2010) investigated how globalized oil production generates armed rebellion and displacement and how instead of tackling the fundamental causes of local discontent, hardliners in the military's top brass and the ruling class prefer to portray the region's rebels as criminals or jihadists to be destroyed or bought off. Their primary aim is to maintain a power balance in favour of the state-transnational alliance in order to secure optimal oil extraction and accumulation. This contradicts the Niger Delta's argument for demanding mineral management to reclaiming ownership of crude oil. The majority of the people in the Niger Delta depend on the transition of the oil production mode to benefit them. Local populations in Africa's oil-producing countries face daunting environmental challenges, according to Adekola et al. (2017), which lead to tensions and questions about exploitation, environmental effects, and health threats. The lack of appropriate risk communication channels, as well as the effects this has on the public's perception of risk, has been a major source of concern. Concerns have also been raised regarding the risks involved with offshore oil and gas operations, as well as, gradually, the fracking technique. Many populations are facing alarming environmental destruction, posing severe, often large-scale health threats. The region's health problems have been exacerbated by frequent and large-scale leaks. There is now a way to alleviate the mental health system's burden. According to Adekola et al., citizens can make risk exposure decisions if they are given correct and timely risk-based information about a potential hazard (2017). Similarly, since poor health places a financial burden on families and economies, it is likely that it would have an effect on economic well-being. Improvements in economic well-being and social stability will then be used to solve the issue of oil smuggling, vandalism, bunkering, illegality, extortion, and

violence that has plagued those populations. According to Nriagu et al (2016), despite the fact there have been few reports on the effects of the oil industry in the region, it is apparent that it has added to the region's health problems. Environmental insecurities in the Niger Delta have robbed certain people of their natural resources, customs, and even civilization. Oil mining has created room for a people to be raped off their property, further impoverishing and harming their welfare. The Niger Delta situation is clearly one of global environmental injustices, with damage fuelled by the 'Global North,' which encourages human rights abuses in the 'Global South.' For decades, some host populations have called for resource management and commitment, and the government should take this into account.

## CHAPTER III

### **Ecological /Health Related Consequences of Crude Oil in The Niger Delta Region**

#### **Socio-Ecological Sustainability of Nigeria's Niger Delta Region**

Niger Delta area is Nigeria's oil basket and looks to be sitting on an environmental ticking bomb as a result of enormous petroleum pollution. Since more than 5,284 oil tanks are scattered across the delta area and thousands of kilometres of oil and gas pipelines, the number of places in which oil, gas flaring and chemical waste pollution might put ecological problems at risk is similar (Nwozor et al., 2018). Nigeria's government has a tendency to distribute its "national cake," i.e., petroleum revenue, without taking much responsibility for environmental conservation (Ikpeze et al., 2004). Although actual earnings of Nigeria from crude oil are open to conjecture since it was found in commercial amount in 1956, the country has garnered more than USD 600 billion between 1960 and 2009. Recent estimates have shown Nigeria's total income of US\$1 trillion since the 1970s and a calculable proportion of environmental harm is related with each dollar derived from oil that can be calculated and used for its sustainable development (Felix, 2020). In terms of destruction of the Niger Delta Ecosystem, traditional livelihoods have destabilized. The region's environmental compound was systematically influenced by oil extraction, gas, oil spills, wastewater disposal, toxic and dangerous chemicals, and environmental deterioration. It is essential that actions that will bring outcomes of recovery and remediation be implemented. The socio-economic and demographic developments in the region make these actions more essential. There is also the continuing shrinking of its inhabitable territory following the construction of additional oil wells, therefore weakening the potential of establishing non-oil property.

#### **Benefits of Oil Exploration and Exploitation in Niger Delta**

The oil sector has helped many Nigerians by providing work for individuals of various skill levels (highly qualified, semi-skilled, and unskilled). Total, Shell, Mobil, Chevron, Agip, and other multinational oil companies make available some of the best-paying employment in the world, attracting a large number of young people. The Nigerian National Petroleum Corporation (NNPC) manages direct purchases of crude oil to generate revenue for the Nigerian government (NNPC). Petroleum profit tax,

royalties, a penalty for gas flaring, and rental fees are all paid by oil producers (Tseghe, 2013). As a result of the large quantities of money created by the oil sector, the nation has been able to boost expenditure and investment. Oil has made Nigeria's brand well-known across the world and Nigeria has several billion barrels of reserves, accounting for a little percent of worldwide reserves. In addition to being one of the top ten oil producers in the world and the sixth largest exporter by OPEC members. Oil discovery brought Nigeria tremendous wealth, with the government earning an several billions of dollars in oil-related fiscal income between 1971 and 2005, making it Africa's largest economy as shown on Table 3.1.

Year	Oil (Billions in Naira)	Non-Oil (Billions in Niara)	Total (Billions in Naira)
1999	1,169.50	19.5	1,189.00
2000	1,920.90	24.8	1,945.70
2001	1,839.90	28	1,868.00
2002	1,649.40	94.7	1,744.20
2003	2,993.10	94.8	3,087.90
2004	4,489.50	113.3	4,602.80
2005	7,140.60	106	7,246.50
2006	7,191.10	133.6	7,324.70
2007	8,110.50	199.3	8,309.80
2008	9,861.80	525.9	10,387.70
2009	8,105.50	500.9	8,606.30
2010	11,300.50	711	12,011.50
2011	14,323.20	913.5	15,236.70
2012	14,260.00	879.3	15,139.30
2013	14,131.80	1,130.20	15,262.00
2014	12,007.00	953.5	12,960.50
2015	8,184.50	660.7	8,845.20

**Figure 4** Export in Nigeria from 1999 to 2015(Source: CBN Statistical Bulletin, 2015).

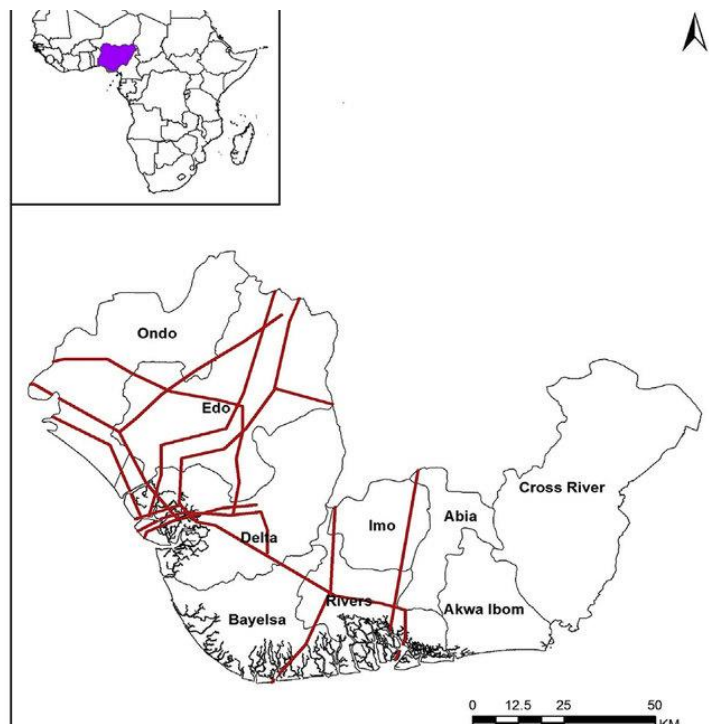
Exploration is the process of using scientific know-how to mine or harvest natural resources. According to the Nigerian Environmental Study/Action Team (1991), as cited by Mba (1995), there are three (3) types of mineral resources: fuel, metallic, and industrial minerals, each with its own discovery process. Exploration, mining, refining, distribution, storage, and use of gasoline, natural gas, coal, lignite, and uranium are all part of the fuel mineral exploration operation. Metallic exploration refers to similar practices involving iron, gold, columbite, cassiterite, and tantalite, while industrial exploration refers to activities involving limestone, marble, feldspars, gypsum, gravel, and sand, among others (Maduaka, 2014). Fuel exploration is conducted mostly for the purpose of extracting oil from latent energy in rocks, while metallic exploration is done for industrial and economic purposes, and industrial exploration is done for the purpose of using minerals in construction.

## **Consequences of Oil Exploration and Exploitation in Niger Delta**

Industrial production began in 1958 in a Niger Delta town with about 6000 barrels per day (Ejenavi, 2018). As a consequence of oil discoveries and operational procedures, the area became an environmentally friendly wilderness. Mangroves are big trees or bushes, which have developed in tough settings. In view of the high salinity, anaerobic and waterlogged soils, as well as a tough seed dispersion and propagation environment, it has evolved exceptional survival features. Biological variety in mangrove ecosystems includes mammals (mammals, antelopes and manatees), mollusks (bivalves, oysters), crustaceans, fisheries, reptiles and birds, and marine and terrestrial flora and fauna. Mangroves contain many environmental resources, however, possibly endangered by oil drillings and climate change, which contribute to their human well-being.

The bulk of marine oil boiling is conducted at susceptible environments, such as inland sea beds or inland racks, where a variety of benthic animals live. In marine ecosystems there is an important bio-indicator for microbiological populations, habitat-forming organism, invaluable mangroves, sea-birds, aquatic animals and invertebrate. Garbage water produced, fracking fluids, cuttings and disposals for wells, washing and disposal water, toilet and household waste, as well as waste and discharges damage the ecosystem. All terrestrial impacts include situations such as the development of oilfields, pollution of the soil and ground caused by oil spills, exploration leaks and dumping of solid waste. Oil industry activity has typically led to a variety of challenges, including employment displacement, rural-urban drift, jobs and bad human health. The impact of these effects is of particular concern to local and indigenous inhabitants whose traditional, communal and social practices may be affected. Due to oil spills, several cultural activities historically popular in the Nigerian delta's coastal villages are no longer practiced (Onyena & Sam, 2020). A famous example is the joyous swimming of community people on a river. Bathing on that river is a custom and belief that the nation would be led into a "fresh year with lots of good news." As a result, community people see the activity as crucial to their success in the New Year. Since many coastal residents rely on their livelihoods for fishing and farming, any harm to mangroves can impact economically.





**Figure 5** The map of Africa indicating the Niger Delta and pipeline nodes

### **Health Consequences of Crude Oil on Human Security**

Due to oil spills, several cultural activities historically popular in the Nigerian delta's coastal villages are no longer practiced (Onyena & Sam, 2020). It has devastated the environment of the region and damaged its inhabitants. Apart from previously described concerns, human poisoning can lead to breathing failure, renal failure, neurological conditions and death. The combined environmental consequences of these flaring methods result in pollutant accumulation on soil, shallow ground water, greenhouse effect, and overall global warming, as well as high acid rain concentrations in the region (Ana, 2011). Water may also, among other things in rainstorms, destroy valuable unusual wild plants, by leaching and runoff (Manisalidis et al., 2020). Nigeria urgently requires structural, behavioural, and physical changes in order to properly manage solid waste challenges, given the significant environmental and public health repercussions of insufficient solid waste disposal. Soil contamination, ecosystem deterioration, and ground water pollution have all been linked to crude oil exploration and production, as well as the waste and discharges that go with it.

## CHAPTER IV

### Resource Governance Dimension-Main Analysis

As discussed above, the governance of natural resources, particularly in the extractive sector, has been a significant challenge with Nigeria. The Nigerian extractive sector of solid minerals has scarcely been effectively exploited and controlled; therefore, providing plenty of scope for unhealthy and unsustainable use of resources, with adverse environmental and economic effects (Akinsulore&Akinsulore,2021). Nigeria is a flagrant example of a country where, despite its immense natural resources, inadequate governmental institutions are overwhelming. The existence of abundant natural resources has aggravated the enormous task of economic growth (Abou-Zaid et al., 2021). While the most empirical results of resource effect include how the growth route is selected through the institutional channel, the question is why the rent of resources frequently does not encourage better governance. Countries blessed by rich natural resources frequently seek from their allegedly fortunate status financial and political influence. However, a phrase "resource curse" refers to the possible harmful influence of nature resources on the development of poorer countries. Many in the poorest sections of Africa and Asia typically remain in poverty, tormented by economic mismanagement, political despotism, foreign exploitation and violent conflict rather than prosperity and success, gold, oil, rubber, sugar and other commodities (Gapa,2013). These problems and the numerous obstacles that they present demand for international cooperation for greater transparency and better management of riches of natural resources.

**Table 1** Regulatory and governing bodies of oil resources in Niger Delta

Laws/Regulations/Bodies Responsible	Mission
Nigerian National Petroleum Corporation (NNPC)	NNPC was set up in 1977 with the full responsibility of Nigeria for its oil activities. NNPC is active through its subsidiaries in the exploration, manufacture, transport, processing of oil, refining and selling of crude oil.
The Nigerian Oil and Gas Industry Contents Development Act 2010	The Act provides the Nigerian Content Development and Monitoring Board (NCDMB) for guidance, supervision, coordination and enforcement of the terms of the Law under section 4 of the Act. The Act is intended to promote the autonomy of the oil and gas sectors in the nation.
The Ministry of Petroleum Resources	The Petroleum Ministry has a general task of supervising and regulating the oil and gas industries. The Department also formulates, coordinates and pursues federal oil and gas policy.
The Environmental Impact Assessment (EIA) Act of 1992	This Act sets out the need to carry out environmental impact assessment prior to coming into circulation for natural gas production projects. The aims of the act are to permit the undertaking of an activity to take into account those things that may, or are likely to, significantly affect the environment and/or have an environmental effect.

Environmental security (ES) has been described by Amadi & Alapiki (2018) from a variety of viewpoints, including the absence of ecological challenges that pollute the environment and have negative consequences for humans. Environmental stability in

the coastal Niger Delta has sparked academic attention in recent years from a variety of viewpoints pursuing a better understanding of state policy responses. Despite the flaws associated with oil discovery in Nigeria, Collins (2018) believes that the initiative to get the host groups into the display of policymaking to enshrine their urgent interests, issues, and developments into the programs was one of the grey areas that needed to be discussed. In all honesty, it is self-evident that Nigeria's economy is solely dependent on oil production and exportation for its development. According to statistical estimates, Nigeria's total crude oil output per day from 1956 to 1984 was just 7,000 barrels per day, but today's Nigerian National Petroleum Co-operation (NNPC) data reveals that Nigeria produces over 2.8 million barrels of crude oil per day for export, negating the losses due to piracy. Oil revenue in Nigeria has a good chance of contributing to the country's socioeconomic and political growth, despite the fact that it has a negative effect on the climate and those who live in it. Despite the affluent nature of Nigeria, the rate of slow developmental indices, accountability of revenues accrued from oil sales, human capital development, infrastructures, roads, social amenities, independence in exploration, advancement in science and technology, indigenous material production, negligence to environmental degradation, political instability, and corruption, among other setbacks, are cause for concern. According to Chinedu & Chukwuemeka (2018), environmental contamination by heavy metals has become a growing source of ecological and global health concern. Practices including crude oil exploitation, refining, shipment and storage are responsible for oil spills and lead to leakage of oil into the natural world. Accidents, a shortage of engineering infrastructure servicing, and intentional actions all contribute to spillage (including oil bunkering and sabotage). Natural events, such as earthquakes and storms, will also result in oil spills. Eweje (2006) has declared the host populations of Niger Delta to be ethically unethical for petroleum corporations, because their areas are not protected against ecological destruction. Companies have a spiritual duty and the duty of protecting host populations from the environmental effects of events, and host countries have also been advised to aid with regulating the physical atmosphere. In the event that demands are in accordance with universal norms in host nations, it is therefore insufficient to comply with minimum laws and regulations. This research further backed the point that the current generation has a moral duty to give future generations a clean, healthy world and it has been found that environmental laws and regulations in the area are not sufficient. Uyigüe & Agho (2007) said the inhabitants

of the Niger Delta face a plethora of climate change environmental issues and the actions of the region's global oil corporations. Effect of oil and mining to the energy and environmental protection of the Niger Delta is minimized among all players concerned (governments, international institutions, civil society organizations, the private sector, academia, United Nations governments, funding organizations, the World bank and communities). It was recommended that the government, as a key developmental supporter, collaborate closely with grassroots organizations that have privileged access to community information. Multinational oil firms working in the area can also implement technology to reduce the environmental effects of their operations. For example, instead of traditional gas flaring, the gas may be converted into more useful items. Instead of flaring smoke, chemical scientists believe it can be turned to alcohol and used in a variety of ways. A-forestation, funding for organic agriculture and fisheries, creation of environmental protection institutions and research institutions, and policy development for the restoration of biodiversity and other endangered species are all examples of environmental conservation efforts that can be undertaken by both the government and multinational companies.

#### **Federal Environmental Protection Agency Act Cap 131 LFN 1990/ 1992**

The FEPA is the most significant act for the preservation of Nigerian environment. The Act set forth measures to minimize damage to the environment in relation to industrial, agriculture and natural resources activities. In order to safeguard people's health, safety and wellbeing from environmental harm and devastations, the Agency offers environmental criteria and specifications, recommendations and regulations on the protection of air, inter-state waterways (Ugochukwu & Ertel, 2008). Leaks in crude oil, gas flaring, and other chemicals used in manufacturing operations are the primary sources of tension. Freshwater habitats in this region of Nigeria have seen effects on the flora and fauna. The government has passed regulations to protect the environment from oil exploration, but it can only be effective if it is introduced, regulated, and supervised by responsible authorities. Oil firms working in this area have also contributed to reducing the environmental effects of their operations. By implication, the whole region's criminal negligence was demonstrated, as were the numerous responses to the region's de-development. The Federal Government of Nigeria's impressionistic attempts to alleviate the region's problems were established.

The government is the major actor because with appropriate supervision, the region can be better and ecologically safe. The displacement of people is also a consequence of energy and environmental insecurity. For the Niger Delta region occupants, they tend to desert the community when there is sense of risk or in cases of heavy oil spills. Research works have again mentioned that the health, environmental/ecological threats which have been mentioned before are still in play. People are still having health complications because of oil spillage whilst the environment is also still getting degraded. It is clear that as much as oil is a great source of income for the Nigerian economy, it is important that the government have an oversight of what is going on during the oil exploration activities.

### **Respond to These Crises by State Organs/Bodies/Governmental Institutions.**

#### **Oil-Exploration Process Corruption**

The Nigerian government has control over crude oil, according to the country's constitution. Joint venture agreements, on the other hand, are used for exploration and production (JVA) and these JVAs determine how the Nigerian government communicate with multinational oil corporations (IOCs) operating in Nigeria's Delta.

The oil income does not go straight to the communities in where crude oil is produced. The distribution is instead given to States and the local governments which, under the Nigerian federation, tend to profit more from oil output, as the distribution of oil earnings is omitted for the communities. Rather, it is the elites which control the institutions of the State and local authorities which determine how these funds are used.

#### **Limitations and Shortcomings in Efforts to Abate Pollution in Niger Delta**

Oil earnings make for the majority of the country's savings and spending, and pollution has not been effectively regulated, and the government is to blame (Smith & Rosenblum, 2011). According to some, the government's inability to solve the Niger Delta's problems is the major cause of the region's oil spills.

Government environmental bodies such as the Department of Petroleum Resources (DPR) and the National Oil Spill Detection and Response Agency (NOSDRA) are unable to respond to oil spills triggered by running oil corporations due to a lack of

willpower. These government departments not only collect intelligence on oil spills from foreign oil corporations, but often rely on them for funding their operations (Watts & Zalik, 2020). As a result of this situation, regulators have come to the realization that they are almost at the hands of running energy companies and are completely reliant on them for technical assistance. However, over time, the Niger Delta habitat has been destroyed due to the processes of petroleum extraction. Concerned over "pollution and environmental destruction to an extent that is humanly intolerable," the African Commission urged Nigeria and Shell to take steps to address the environmental harm. Despite the allegations and attempts at legal settlement, neither the Nigerian government nor Shell has taken any steps to rectify the situation. Despite the fact that both the Nigerian government and Shell have agreed to following UNEP's EIA guidelines, neither has begun cleaning-up operations. Shell pledged to avoid gas flaring in 2008, but the company has yet to do so. It keeps pushing back the date, blaming the delay on instability in the Delta exacerbated by local populations. Shell and the Nigerian government promised money and began cleaning-up operations in 2014, after a movement led by Nigerian civil society.

### **Comparison across Oil Producing States**

The oil-producing states of Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo, and Rivers make up Nigeria's Niger-Delta Region (Oviasuyi & Uwadiae, 2010). With its discovery and exploitation, oil is projected to be a boon to that community, area, or region. Since its discovery in 1956, oil has unfortunately proven to be a plague for the region. Oil pollution, environmental degradation, death of aquatic life, and other negative activities that are hostile to the existence and survival of the region's residents have caused immense misery.

Ogbia Local Government Area in Bayelsa State is home to the Ijaw town of Oloibiri, where oil was found in 1956 in commercial quantities (Oviasuyi & Uwadiae, 2010). Villagers in this hamlet are left with just ruined farms and contaminated waterways, as well as a lack of power, drinkable potable water, and other essentials. Ibadan, the capital city of the Western Region of Nigeria, boasts of the Cocoa House and a strong road network, along with good schools and free education. However, successive governments in the nation have purposely and illegally ignored the source of oil money throughout the years. In Edo State, oil exploration began near the mid-1970s in the

hamlet of Oben in the Orhionmwon Local Government Area. As a result, Oben village has nothing to show for it.

There have been attempts by the government to tackle the challenges of the oil producing states and some of these efforts include; the establishment of the Niger-Delta Development Board (NDDDB), establishment of oil Mineral Producing Areas Development Commission (OMPADEC) and Niger Delta Development Commission (NDDC) (Oviasuyi & Uwadiae, 2010). These efforts have majorly been futile hence, the still present struggle in the oil producing regions. It is safe to say that these agencies were not really established to help or develop the oil producing states, but were merely used to promote a charade that something was been done.

In conclusion, corruption is one of the key issues confronting the energy industry, and it must be addressed if the country is to achieve significant progress in terms of energy security for human and the environment. Academic courses on innovative architecture in the context of green energy should be developed at technical schools and universities, as should financial and logistical assistance for innovators to generate patentable/patented innovations for mass manufacturing and commercialization. Actions should also be done to put planning plans in place to limit the possibility for future building emissions. The government should also improve environmental oversight of the region's oil operations. This involves undertaking multi-disciplinary and cross-country public health surveys in the Niger Delta to determine environmental health inequalities. More public recognition, schooling, and participation in oil industry activities are also needed.



## CHAPTER V

### Way Forward to Sustainable and Inclusive Oil Industry

#### **Attaining a more sustainable and inclusive oil industry**

After thorough investigation on the state/ bodies responsible for controlling the crude oil production activities as well as the extent to which these bodies have been able to respond to the calls for human security and environmental security in the region, the following are proposed as the way forward to attaining a more sustainable and inclusive oil industry

The proposed way forward includes:

- (i) To satisfy the country's current and future energy demands, Nigeria needs a long- and short-term government approach, and the economy's power market is extremely dysfunctional, affecting every other sector.
- (ii) Corruption is one of the key issues confronting the energy sector, and it must be addressed if the country is to achieve significant progress in terms of energy security. The current condition of the electricity market, which is monopolized by a single government entity, hinders production and lucrative services; for example, PHCN's sole monopoly of the electrical power grid, and as a consequence, such rules must be modified to ensure energy efficiency.
- (iii) A coordinated plan should be in place to improve Nigeria's energy independence. Increased INET (Investment in Higher Energy Technologies) and new fuel economy requirements for passenger vehicles and heavy-duty trucks can help achieve this. The high price of oil offers significant incentives for the commercial and public sectors to engage in the development and deployment of innovative technologies. Investment in biomass technology will change Nigeria's urban and rural inhabitants from filthy slums to safe, hygienic countries, turning waste into capital while also creating sustainable bio-gas, which is used to power gas turbines for the community's daily energy needs. In addition, the establishment of Solar Power Generating Enterprises would provide remote communities with opportunities to access electricity. This will improve well water pumping, health care supply, and access to new education technologies and lighting, catalyze the growth of cottage industries, and slow urban migration, all of which will continue to decongest cities.

Renewable energy sources such as solar, wind, and biomass technologies are being built with the aim of providing full value to Nigerians at the grassroots level, in both rural and urban areas (Adeyanju et al., 2020). These institutions would ensure the creation of clean energy inventions and advancements; academic courses on inventive architecture in the light of green energy at technical colleges; a joint research synergy between an international research institution, two or more research institutions in Nigeria, and a renewable energy production specialist is required to carry out and implement research findings, especially in the field of renewable energy as also mentioned by Uduma & Arciszewski (2010).

(iv) In support of Ana (2011), another proposed way is the funding strategies that involve banks and NGOs that help diversify the energy market via encouraging and providing access to sustainable energy generation should be made available. The government must see to it that the Delta of Niger is developed at all costs and all applicable legislation and rules in the field of petroleum exploration are complied with. In their approach to the Nigerian Delta situation, the government and international oil companies must sound honest and sincere;

(v) In terms of air emissions, the following steps should be taken to strengthen the existing air quality control and evaluation programs in the Niger Delta:

1. Create oversight, regulatory, and compliance systems.
2. Implement planning plans to reduce potential emissions from future construction.
3. Prioritize lowering emissions from automobiles, factories, gas flaring, and residential wood burning to acceptable levels as set out by national and international standards.
4. The health and biodiversity of the region's populations must be extensively studied as a result of air pollution from industrial and vehicular sources.
5. Existing air quality management initiatives should be re-evaluated, and new ones should be developed, in order to determine which ones are the most effective.

(vi) The Multinational Oil Corporations (MNOCs) and the extraction of oil resources are connected to chemical spills, water and soil pollution, methane flaring, acid rains, mangrove destruction and other safety hazards.

## CHAPTER VI

### Conclusion

Nigeria is well-known for being a major crude oil supplier to the United States, with millions of barrels produced every day. The Niger Delta is Africa's biggest wetland, having a wide range of ecosystems that support a wide range of terrestrial and aquatic fauna and flora species (Uzoma & Mgbemena, 2015). Oil spills have plagued the Niger Delta area for decades, resulting in contaminated waterways, streams, and forests, which serve as the principal source of income for the bulk of the rural population. Oil spills are a common result of oil exploration and extraction in the Niger delta, with over 7000 accidents recorded over a 50-year period. Pipeline corrosion and inadequate infrastructure maintenance (Duru, 2014). The nation's electricity stability is not guaranteed by exclusive reliance on a single energy source (Owusu & Asumadu-Sarkodie, 2016). Energy security necessitates the provision of a diverse variety of energy sources in adequate quantities and at fair prices, as well as measures that encourage economic growth, aid poverty alleviation, are environmentally sustainable, and provide for shocks and disruptions. The energy sector has faced a number of challenges, ranging from corruption to security problems raised by both domestic and foreign forces, both of which have had a negative effect on the economy. Nigeria is in a position to offer considerable oil and gas supplies to world energy needs; yet, Nigeria does not have the capability to develop its natural resources owing to internal problems (Oyedepo, 2012). Spilled oil endangers both freshwater and coastal ecosystems. It has an effect on surface resources as well as a diverse variety of subsurface species, all of which are interconnected in a dynamic food chain that includes human food sources (Mba et al., 2019). Spilled oil can affect the environment in a variety of ways, including physical damages that actually affect animals and their environments (such as painting birds or rodents in oil), as well as the oil's toxicity, which can poison exposed species.

The concepts of energy security, human security, and environmental security and the concerns surrounding oil spillage were thoroughly explained in this study. The theoretical frameworks of human perspective of human security as well as environmental degradation relating to environmental security were explored in this research as theoretical frame work. Following this, the socio-ecological and health related concerns were investigated. With this investigation, the research questions

entailed searching for existing laws/regulations/directives and state bodies responsible for oil resources governance in Niger Delta as well as the context in which the state organs/bodies/, governmental institutions respond to these crises. This investigation then led to the analysis of the data collected from previous researches on the dimension of governance of natural resource in the region. The issue of corruption in the oil exploration process, Government's limitations, shortcomings in efforts to minimize pollution were also discussed.

The research investigation revealed that despite government efforts to eliminate gas flaring and oil spillage, these oil production and exploitation methods continue to contribute to Niger Delta's environmental degradation. Another major environmental problem is deforestation, which occurs as a result of mining, fires, and livestock overgrazing. Since 1990, the quantity of forestland has been reduced by about half. Nigeria's natural resource governance, notably in the extractive industry, has been a serious problem. Nigerian extractive sector of solid minerals has scarcely been effectively exploited and controlled; therefore, providing plenty of scope for unhealthy and unsustainable use of resources, with adverse environmental and economic effects on oil production and its pollution have exacerbated environmental destruction throughout the Niger Delta, resulting in dead fish and crops, posing a danger to food. In filthy rivers and rivers, they had to drink and bathe. Many populations are facing alarming environmental destruction, posing severe, often large-scale health threats and people continue to suffer health consequences. The way forward to fulfill Nigeria's current and future energy demands, a stable and reliable oil foundation requires a long- and short-term government strategy to ensure that the economy's energy market is more functional. The government should also improve environmental oversight of the region's oil operations and this will involve undertaking multi-disciplinary and cross-country public health surveys in the Niger Delta to determine environmental health inequalities. Actions should also be done to put planning plans in place to limit the possibility for future building emissions. It is recommended that serious consideration should be given to the proposed ways to attain a more sustainable and inclusive oil industry in the Niger Delta region and in Nigeria as a whole.

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**APPENDIX A**  
**Turnitin Similarity Report**

STATE RESPONSES TO  
ECOLOGICAL CRISIS OF OIL  
PRODUCTION IN NIGER DELTA

*by* Godstime Gaius

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Submission date: 25-Oct-2021 11:26AM (UTC+0300)

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## STATE RESPONSES TO ECOLOGICAL CRISIS OF OIL PRODUCTION IN NIGER DELTA

### ORIGINALITY REPORT

<b>15%</b>	<b>11%</b>	<b>7%</b>	<b>7%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

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<b>4</b>	Amarachi Paschaline Onyena, Kabari Sam. "A review of the threat of oil exploitation to mangrove ecosystem: Insights from Niger Delta, Nigeria", Global Ecology and Conservation, 2020 Publication	<b>&lt;1%</b>
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## APPENDIX B

### Ethics Committee Approval



BİLİMSEL ARAŞTIRMALAR ETİK

KURULU

12.10.2021

Dear God'stime Gaius

Your project "State Responses to Ecological crisis of oil production in niger delta: Human and Enviromental security perspective " has been evaluated. Since only secondary data will be used the project it does not need to go through the ethics committee. You can start your research on the condition that you will use only secondary data.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

**Note:** If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

## APPENDIX C

### CURRICULUM VITAE

#### GAIUS GODSTIME

<https://www.linkedin.com/in/godstime-gaius>  
 +905338672055 |gaiusgodstime97@gmail.com  
 Nasarawa Karu LGA, Nigeria

#### PROFILE SUMMARY

Highly dynamic and results-oriented professional, with more than 3 years of broad-based experience in production management, communication management and journalism in a fast-paced and content-driven setting. Articulate communicator with well-defined editorial skills and well-honed news judgment, leadership and decision-making aptitude. Proficient in providing administrative support to executives, performing office and clerical duties. Strong interpersonal skills with a solid track record in employee mediation and team-building. Expert in preparing correspondence, revising documents, distributing mail and maintaining the database. Displays outstanding ability to plan, coordinate, and implement practices and procedures to bring significant improvements in processes towards the successful attainment of goals.

#### EDUCATION

<b>M. Sc International Relations</b> -Near East University TRNC	<b>2021</b>
<b>B.Sc. Mass Communication – ESPAM Formation University</b> , Cotonou, Benin Republic	<b>2017</b>
<b>Senior School Certificate Examination (SSCE)</b> - Chrisfus Hillcrest School Ado, Nasarawa State, Nigeria	<b>2014</b>
<b>First School Leaving Certificate (FSLC)</b> -L.G.E. A Aso Pada, Nasarawa State, Nigeria	<b>2008</b>

#### SKILLS HIGHLIGHTS

- Top research and investigative skills with excellent attention to detail and observational ability and a talent for finding obscure information.
- Proficient in writing scripts for headlines, and present full stories to the masses in an upbeat and clear fashion.
- Proven ability to manage, plan and administer a range of administrative operations across many different departments.
- Strong leadership skills, superior analytical skills, team management, result-oriented, and interpersonal skill.
- Skilled at Interacting effectively with cross-functional departments to streamline operations and achieve business success in fast-paced environments.

## CORE COMPETENCIES

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- Live Sessions
- Process Improvement
- Content Management
- Operational Streamlining
- News Research
- Office Administration
- Story Development
- Social Media Management
- Executive Support
- Resource Management
- Confidentiality
- Database Administration

## WORK EXPERIENCE

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### **Presenter – ECWATV AFRICA**

#### **Jan. 2018 - Present**

- Organises material and writes story conforming to specified length, style, and format requirements.
- Develops and implements communication material including news releases, promotional publications, email correspondence and Web site content.
- Updates the station log. This information is given to the traffic department for the log of daily station activities the NBC (National Broadcast Commission) requires.
- Create ideas and stories; contribute to the creative process and be a part of an item or program's production.
- Answers calls during live programs; holds conversations and attends to call-in listeners' enquiries during the show.
- Announces commercials, gives weather and traffic reports and updates, and either introducing New and reporting breaking news.

### **Communication Assistant – Youth Initiative for Sustainable Human Development in Africa (YiSHDA Jan. 2017 – Dec. 2017**

- Assisted program communications team with business strategies, social media, media relations and tracking communications results.
- Tracked projects and media exposure as well as update databases and media lists.
- Created and edited communications copy such as press releases, publications, and social media posts.
- Provided administrative support to company's ongoing programs as well as internal teams.

## CERTIFICATION

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- **Human Resource Management (HRM) Course 2018**
- **Project Management Professional (PMP) Course 2018**
- **Customer Service & Relationship Management (CSRM) Course 2018**
- **Health Safety & Environment (HSE,1,2&3) Course 2018**