

Impact of Sabotage, Oil Theft and Illegal oil Bunkering Activities on the Nigerian Environment and Economy

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Abstract

This research work examined the rising cases of sabotage, oil thefts and illegal oil bunkering activities in the Niger Delta region of Nigeria. The aim was to critically examine the impact of sabotage, oil theft and illegal oil bunkering activities on the Nigerian environment and economy. The location of the study is the Niger Delta region of Nigeria. The study was timed within the period of January 2020 to November 2020 (a duration of 11 months). Secondary data were generated for the study, while content analysis was used for data interpretation and analysis. The study revealed that activities of sabotage, oil theft and illegal oil bunkering impacted negatively on the environment and the national economy. The study also revealed that different individuals and groups were involved in sabotage, oil thefts and illegal oil bunkering activities. The study further proved that persistent sabotage and illegal oil bunkering activities in the Niger Delta region is due to the systemic corruption by Nigerian elites, government's inappropriate policies, high level of youth unemployment, ineffective and corrupt law enforcement agencies and international crime collaborations. It was recommended that the government should be sincere in its fight against sabotage, oil theft and illegal oil bunkering and should formulate policies that are geared towards embarking on mass literacy and educational programmes on poverty eradication as this will re-orient Nigerians and eradicate this concept of "get rich quick syndrome" and thereby sustaining the environment and economy.

Keywords: Sabotage, Oil Theft, Illegal oil Bunkering

1. Introduction

It has been deliberated upon and come to terms by most scholars that Crude Oil is the livewire of the modern economy and it has now become a vital commodity globally because many products can be derived from crude oil, hence crude oil is seen as the "mother of all commodities" because it is used to manufacture numerous products, including gasoline, synthetic fabrics, plastics and pharmaceuticals (Investinganswers, 2011; Adishi & Hunga, 2017; Wintershaldea, 2022). Many countries today will find it difficult to survive without crude oil products, that is why crude oil is described as the "lifeblood of the modern world" for if there is no oil, there would be no globalization, no plastic, little transport, and a worldwide landscape that would be recognized by few (Smil 2008; Adishi & Hunga, 2017). For developing countries that have no oil, they are confronted with the challenge of severe struggle for survival: but if they lose this fight, they will be drawn back to the "fourth world", the movement and push for progress would be retarded and life on its own would become unbearable if the world was without oil. That is why oil has become a major focus of governments, a vital constituent of their policies and a crucial factor in their political and diplomatic strategies (Yergin, 2020). However, the challenges of crude oil theft which impacts negatively on the national economy abound (Adishi & Hunga, 2017). The problem of environmental degradation caused by Sabotage and crude oil theft is becoming a major problem in Nigeria, as it was reported that Nigeria was losing about \$7 billion annually to oil theft; crude oil theft has led to damages of pipelines, making the oil firms to have low output in oil production and environmental degradation through oil spillage (Enakireru & Irene, 2014). In order to combat this menace of sabotage and oil theft, the Federal Government of Nigeria has enacted a number of laws and regulations (Adishi & Hunga, 2017).

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This menace had degenerated into a national crisis that could cause adverse effects on the effectiveness and full implementation of the National budget (Enakireru & Irene, 2014). According to environmental experts, in Nigeria, crude oil theft has caused oil spillage mainly in the Niger Delta region and sadly, the spillage is ravaging our environment, posing one of the greatest threats to the country's ecosystem (Adishi & Hunga, 2017). In the Niger Delta region of Nigeria where crude oil theft is prevalent, oil spillage and bunkering activities have reduced the evergreen mangrove forest to mere grasses while fish and other aquatic animals in the water are at the verge of extinction (Enakireru & Irene, 2014). According to Shell Petroleum Development Company (SPDC), more than 70% of all oil spill incidents from SPDC facilities in the Niger Delta between 2006 and 2010 were caused by crude oil theft and illegal refining which has resulted in consistent pollution of farm lands and rivers. Statistics shows that crude oil spills caused by oil theft in the country is alarming while the impact on the environment is disheartening adding that pollution from oil spill is ravaging the environment (Enakireru & Irene, 2014; Bunmi, 2022).

1.1 Aim and Objectives of the Study

The aim of this research was to critically examine the impacts of sabotage, oil theft and illegal oil bunkering activities on the Nigerian environment and economy. Specifically, the study sought to achieve the following objectives:

- i. To clearly unravel the menace of sabotage, oil thefts, illegal oil bunkering in the Niger Delta of Nigeria

- ii. To present the oil spill data for 2020 showing the spill incident, causes, terrain and estimated spill volume, using the published oil spills data from SPDC (SPDC, 2020).
- iii. To evaluate the effects of sabotage, oil theft, illegal oil bunkering activities on the environment.
- iv. To evaluate the effects of sabotage, oil theft illegal bunkering activities on the Nigerian economy.
- v. To reveal the actors and operational mechanisms of the sabotage, oil thefts and illegal oil bunkering in the Niger Delta.

1.2 Significance of the Study

The study will serve as a very useful and veritable source of information to host communities, multinational and indigenous oil companies, the government and other stakeholders in oil exploration to combat sabotage, oil thefts and the illegal oil bunkering in Nigeria.

1.3 Limitation of the Study

The research was limited to an extent as the researchers were confronted with security challenges as the youths who were been used by these highly profiled bunkers to achieve their selfish interest were very sensitive, violent and brutal. They suspect every moves made by any foreign face unknown to them. To them any foreign face not known to them might be a spy or considered a threat to their illegal operations.

2. Material and Methods

The research study employed both theoretical review and empirical review approach.

2.1 Theoretical Review

This study anchored on Strain theory by Robert K. Merton. Strain theory states that: “society puts pressure on individuals to achieve socially accepted goals, though they lack the means, this leads to strain which may lead individuals to commit crimes, like selling drugs or becoming involved in prostitution as a means to financial security” (Merton, 1938). Strain could be:

- i. Structural: which refers to the process at the societal level which filter down and affects how the individual perceives his

or her needs, that is, if particular social structures are inherently inadequate or there is inadequate regulation, this may change the individual’s perceptions as to means and opportunity; or

- ii. Individual: this refers to the frictions and pains experienced by an individual as he or she looks for ways to satisfy his needs. That is if the goals of the society become significant to individual, then, achieving them may become more important than the means adopted.

2.2 Empirical Review

This was done by visiting different communities in the Niger Delta region, pictures were taken at some of the sites that the sabotage, oil theft and bunkering activities were carried out, interviews were conducted to residents in the region and some of the perpetrators of these activities under strict conditions given by them.

2.3 Methodology

This study which focused on sabotage, oil thefts and illegal oil bunkering activities was conducted in the Niger Delta region of Nigeria. The duration of this research study was 11 months (January 2020 to November 2020). This study is qualitative and exploratory in approach. Secondary data constitute the basis of data collection, interpretation and analysis. Data were collected through interviews conducted and relevant literatures on the subject were consulted and used for the research study. The thrust of analysis was systematically conducted under selected themes and sub-themes which was designed to address the salient aspects of the said objectives of the research study.

3. Results

3.1 Oil Spills

The oil spill data from the Shell Petroleum Development Company (SPDC) that occurred at different locations of the Niger Delta region during the period of this research study (January, 2020 – December, 2020) are shown in table 1 – 10 below. The location, the terrain, the cause and the estimated spill volume (bbl.) where clearly captured. The result showed that majority of the spills were caused by sabotage and not operational fault. The summary and total number of oil spills that occurred from January to November, 2020 is further shown in table 4.12 below. The result indicates that a total of 130 oil spills occurred for the period, out of which 117 were caused by sabotage and 13 were caused by operational fault. The percentage (%) contribution of oil spills caused by Sabotage as revealed by the study was calculated to be 90%, whereas the percentage (%) contribution of spills caused by operational fault recorded were calculated to be just 10%.

Table 1: Oil spill Data for January 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl.)
Jan 02, 2020	20" Trans - Escravos Pipeline at Ugboegungun	Jan 05, 2020	Swamp	Sabotage	9
Jan 06, 2020	12" Imo River 1-Ogale Pipeline at Uzuaku	Jan 07, 2020	Land	Sabotage	1
Jan 11, 2020	4" Umuechem well 15S Flowline at Umuechem	Jan 15, 2020	Land	Operational	0.5
Jan 13, 2020	12" Imo River-Ebubu Pipeline at Isietiti-Oha Owaza	Jan 14, 2020	Land	Sabotage	0.3
Jan 15, 2020	20" Kolo Creek -Rumuekpe Pipeline at Rumuekpe.	Jan 17, 2020	Land	Sabotage	181
Jan 15, 2020	8" Agbada2-Nkpoku Pipeline at Igwuruta	Jan 16, 2020	Land	Sabotage	12
Jan 17, 2020	12" Imo River1 - Ogale Pipeline at Umuololo	Jan 19, 2020	Land	Sabotage	3
Jan 17, 2020	4" Kanbo 3L Flowline at Egbemo-Angalabiri-Agbidiana	Jan 28, 2020	Swamp	Sabotage	2

Jan 18, 2020	12" Imo River 1- Ebubu Pipeline at Ogale	Jan 19, 2020	Land	Sabotage	4
Jan 20, 2020	8" ObIgbu North -New Elelenwa Pipeline at Umusonya	Jan 21, 2020	Land	Sabotage	28
Jan 21, 2020	20" Kolo Creek -Rumuekpe Pipeline at Odau KM10	Jan 24, 2020	Land	Sabotage	247
Jan 28, 2020	20" New Kolocreek - Rumuekpe Pipeline at Oruma	Jan 30, 2020	Land	Sabotage	57

Table.2: Showing Oil spill Data for February 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl.)
Feb 06, 2020	12" Imo River 2 to Ebubu Pipeline at Ogale	Feb 08, 2020	Land	Sabotage	17
Feb 11, 2020	14" Okordia to Rumuekpe Pipeline at Ikata	Feb 13, 2020	Land	Sabotage	473
Feb 19, 2020	28" Bomu to Bonny Pipeline at Bodo West	Feb 20, 2020	Swamp	Sabotage	3
Feb 19, 2020	12" Imo River 1 to Ogale Pipeline at Uzuaku	Feb 20, 2020	Land	Sabotage	3
Feb 23, 2020	14" Okordia – Rumuekpe Pipeline at Akalamini	Feb 25, 2020	Land	Sabotage	904
Feb 24, 2020	24" Ogale - Bomu Trans Niger Pipeline at Biara	Feb 25, 2020	Land	Sabotage	8
Feb 26, 2020	36" Nkpoku - Bomu Pipeline at Atali	Feb 27, 2020	Land	Sabotage	864
Feb 26, 2020	14" Okordia – Rumuekpe Pipeline at Akalamini	Feb 26, 2020	Land	Sabotage	5
Feb 26, 2020	14" Okordia – Rumuekpe Pipeline at Akalamini	Feb 27, 2020	Land	Sabotage	0.7
Feb 28, 2020	4" Imo River Well 43T Flowline at Igiukwu	Mar 03, 2020	Land	Sabotage	1

Table 3: Oil spill Data for March, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl.)
Mar 05, 2020	Obele Flowstation at Obele	Mar 10, 2020	Land	Operational	3
Mar 11, 2020	28" Nkpoku - Ebubu Pipeline at Rumuowha – Eneka	Mar 12, 2020	Land	Sabotage	2
Mar 12, 2020	12" Imo River2 - Ogale Pipeline at Umuololo	Mar 12, 2020	Land	Sabotage	3
Mar 16, 2020	20" KoloCreek Pipeline at Okporowo	Mar 16, 2020	Land	Sabotage	3
Mar 16, 2020	4" Etelebou Well 1S Flowline at Ogboloma	Mar 18, 2020	Land	Operational	12
Mar 17, 2020	12" Oguta to Egbema Pipeline at Eziorsu	Mar 18, 2020	Land	Sabotage	150
Mar 21, 2020	Old 20" Kolocreek - Rumuekpe Pipeline at Odau (KP9)	Mar 21, 2020	Land	Sabotage	215
Mar 22, 2020	North Bank Central Processing Facility Conensate Delivery line at Obotobo	Mar 25, 2020	Swamp	Operational	7
Mar 25, 2020	28" Nkpoku - Bomu Pipeline at Akpajo	Mar 26, 2020	Land	Sabotage	136
Mar 25, 2020	28" Nkpoku - Bomu Pipeline at Eteo	Mar 26, 2020	Land	Sabotage	3
Mar 25, 2020	28" Nkpoku - Bomu Pipeline at Rumuewhara	Mar 26, 2020	Land	Sabotage	4
Mar 27, 2020	Nun River Well 13T Wellhead at Angiama	Mar 28, 2020	Swamp	Operational	43
Mar 27, 2020	16" Egbema - Assa Pipeline at Umudike	Mar 30, 2020	Land	Sabotage	4
Mar 30, 2020	Benisede well 24L Bean Box at Benisede	Apr 25, 2020	Swamp	Operational	10
Mar 31, 2020	14" Okordia Rumuekpe Pipeline at Akinima	Mar 31, 2020	Land	Operational	48

Table 4: Oil spill Data for April, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl.)
Apr 03, 2020	12" Oguta - Egbema Pipeline at Umunkwu	Apr 04, 2020	Land	Sabotage	460
Apr 06, 2020	28" Bomu - Bonny Pipeline at Bodo	Apr 06, 2020	Swamp	Sabotage	0.5
Apr 07, 2020	20" Kolocreek - Rumuekpe Pipeline at Odau KM9	Apr 09, 2020	Land	Sabotage	100
Apr 09, 2020	20" Kolocreek - Rumuekpe Pipeline at Odau KM10	Apr 09, 2020	Land	Sabotage	186
Apr 09, 2020	20" Kolocreek - Rumuekpe Pipeline at Odau KM9	Apr 09, 2020	Land	Sabotage	50
Apr 10, 2020	20" Kolocreek - Rumuekpe Pipeline at Odau KM9.4	Apr 11, 2020	Land	Sabotage	127
Apr 12, 2020	18" Assa - Rumuekpe Pipeline at Ochia-Awarra	Apr 14, 2020	Land	Sabotage	5
Apr 13, 2020	10" Diebu Creek - NunRiver Pipeline at Osokama – Oporoma	Apr 15, 2020	Swamp	Sabotage	86
Apr 15, 2020	14" Okordia-Rumuekpe Pipeline at Ihuowo	Apr 17, 2020	Land	Sabotage	37
Apr 16, 2020	20" Rumuekpe – Nkpoku Pipeline at Ibaa	Apr 17, 2020	Land	Sabotage	284
Apr 16, 2020	18" Assa -Rumuekpe Pipeline at Ochia	Apr 16, 2020	Land	Sabotage	3
Apr 17, 2020	14 " Okordia-Rumuekpe Pipeline at Oshika	Apr 19, 2020	Swamp	Sabotage	154
Apr 20, 2020	16" Tunu - Brasscreek Pipeline at Agbidiama	Apr 24, 2020	Swamp	Sabotage	2
Apr 20, 2020	8" Nkali-Imo River2 Pipeline at Odagwa	Apr 21, 2020	Land	Sabotage	0.7
Apr 22, 2020	12" Imo River - Ogale Pipeline at Etituzo – Umuololo	Apr 23, 2020	Land	Sabotage	8
Apr 22, 2020	Imo River Well 26 Flowline at Igiriukwu-Owaza	Apr 24, 2020	Land	Sabotage	8
Apr 23, 2020	12" Adibawa - Okordia Pipeline at Ikarama	Apr 25, 2020	Land	Sabotage	54
Apr 26, 2020	14" Okordia-Rumuekpe Pipeline at Edeoha	Apr 27, 2020	Land	Sabotage	20
Apr 30, 2020	12" Imo River - Ogale Pipeline at Umuololo	May 01, 2020	Land	Sabotage	30

Table 4.5: Oil spill Data for May 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl.)
May 01, 2020	28" Nkpoku - Bomu Pipeline at B-Dere	May 02, 2020	Land	Sabotage	16
May 02, 2020	28" Nkpoku - Bomu Pipeline at Elenenwo	May 02, 2020	Land	Sabotage	60
May 03, 2020	14" Okordia – Rumuekpe Pipelin at Edeoha	May 05, 2020	Land	Sabotage	8
May 03, 2020	16" Egbema – Assa Pipeline at Etekwuru	May 07, 2020	Land	Sabotage	63
May 04, 2020	8" Nkali – Imo River Pipeline at Odagwa	May 04, 2020	Land	Sabotage	1
May 05, 2020	4" Imo River Well 55S Flowline at Igiriukwu	May 05, 2020	Land	Sabotage	1
May 08, 2020	3" AdibawaWell 6T Flowline Flange at Edagberi-Betterland	May 12, 2020	Land	Operational	0.7
May 09, 2020	4" Bonny Well 10S Flowline Riser at Oloma	May 25, 2020	Swamp	Operational	0.1
May 27, 2020	20" Kolocreek - Rumuekpe Pipeline at Aminigboko	May 30, 2020	Land	Sabotage	3
May 28, 2020	4" Kanbo Well 5L Flowline at Tunu	Jun 04, 2020	Swamp	Sabotage	0.03
May 30, 2020	12" ImoRiver 2 - Ogale Pipeline at KomKom	May 31, 2020	Land	Sabotage	2

Table 6: Oil spill Data for June, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Jun 01, 2020	28" Bomu - Bonny Pipeline at Owokiri	Jun 02, 2020	Swamp	Sabotage	0.04
Jun 04, 2020	14" Okordia - Rumuekpe Pipeline at Edeoha	Jun 06, 2020	Land	Sabotage	23
Jun 05, 2020	14" Okordia-Rumuekpe Pipeline at Ula-Ikata	Jun 07, 2020	Swamp	Sabotage	20
Jun 06, 2020	28" Nkpoku - Bomu Pipeline at Rumuowha	Jun 07, 2020	Land	Sabotage	3
Jun 07, 2020	20" Kolocreek - Rumuekpe Pipeline at Odau KP15.3	Jun 09, 2020	Land	Sabotage	326
Jun 08, 2020	12" Imo River - Ogale Pipeline at Umuololo	Jun 09, 2020	Land	Sabotage	53
Jun 08, 2020	12" Imo River - Ogale Pipeline at Umuololo	Jun 09, 2020	Land	Sabotage	66
Jun 10, 2020	28" Bomu - Bonny Pipeline at Kpor	Jun 11, 2020	Land	Sabotage	31
Jun 13, 2020	New 20" Kolocreek - Rumuekpe Pipeline at Okoma 1	Jun 14, 2020	Land	Sabotage	655
Jun 15, 2020	36" Nkpoku - Ogale Pipeline at Rumuokwurusi	Jun 20, 2020	Land	Sabotage	6
Jun 15, 2020	14" Okordia - Rumuekpe Pipeline at Edeoha	Jun 18, 2020	Land	Sabotage	13
Jun 17, 2020	8" Nkali - Imo River Pipeline at Odagwa	Jun 18, 2020	Land	Sabotage	8
Jun 19, 2020	14" Okordia-Rumuekpe Pipeline at Ula-Okobo	Jun 19, 2020	Swamp	Sabotage	13
Jun 24, 2020	4" Soku Well 23S Flowline at Ekineama2-Bush bar	Aug 19, 2020	Swamp	Operational	0.2
Jun 28, 2020	4" Imo River2 - Imo River1 Bulkline at Odagwa	Jun 30, 2020	Land	Sabotage	0.2
Jun 30, 2020	12" ImoRiver 1 - Ogale Pipeline at Umuololo	Jul 01, 2020	Land	Sabotage	1
Jun 30, 2020	12" ImoRiver 2 - Ogale Pipeline at Umuololo	Jul 01, 2020	Land	Sabotage	2
Jun 30, 2020	12" ImoRiver 2 - Ogale Pipeline at Okohia	Jul 02, 2020	Land	Sabotage	46

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Table 7: Oil spill Data for Jul, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Jul 01, 2020	20" Kolocreek - Rumuekpe Pipeline at Owerewere	Jul 05, 2020	Land	Sabotage	24
Jul 01, 2020	8" Seibou - Ajatiton Bulkline at Agbidiana	Jul 02, 2020	Swamp	Sabotage	144
Jul 02, 2020	12" ImoRiver 1 - Ogale Pipeline at Umuololo	Jul 03, 2020	Land	Sabotage	7
Jul 06, 2020	18" Assa - Rumuekpe Pipeline at Egbeda	Jul 07, 2020	Land	Sabotage	186
Jul 07, 2020	28" Nkpoku -Bomu Pipeline at Rumuewhara	Jul 07, 2020	Land	Sabotage	258
Jul 11, 2020	14" Okordia-Rumuekpe Pipeline at Ukpeliide	Jul 13, 2020	Land	Sabotage	304
Jul 11, 2020	18" Assa - Rumuekpe Pipeline at Awara	Jul 13, 2020	Land	Sabotage	12
Jul 12, 2020	8" Nkali - Ogale Pipeline at Odagwa	Jul 14, 2020	Land	Sabotage	1
Jul 13, 2020	12" Oguta - Assa Pipeline at Opuoma	Jul 15, 2020	Land	Sabotage	51
Jul 17, 2020	14" Okordia-Rumuekpe Pipeline at Idu-Ekpeye	Jul 18, 2020	Land	Sabotage	10
Jul 21, 2020	8" Nkali - Imo River2 Pipeline at Odagwa	Jul 22, 2020	Land	Sabotage	2
Jul 27, 2020	4" ImoRiver Well 32L Flowline at Igiriukwu-Owaza	Jul 30, 2020	Land	Sabotage	0.6
Jul 28, 2020	24" Trans Escravos Pipeliene at Ogidigben	Sep 01, 2020	Swamp	Sabotage	65
Jul 30, 2020	14" Okordia – Rumuekpe Pipeline at Edeoha	Aug 01, 2020	Land	Sabotage	390

Table 8: Oil spill Data for August, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Aug 01, 2020	14" Okordia – Rumuekpe Pipeline at Edeoha	Aug 01, 2020	Land	Sabotage	44
Aug 03, 2020	12" Imo River2 - Ogale Pipeline at Umuololo	Aug 04, 2020	Land	Sabotage	75
Aug 06, 2020	6" Imo River Well 59T Flowline at Igiriukwu-Owaza	Aug 08, 2020	Land	Sabotage	5
Aug 08, 2020	24" Nkpoku - Bomu Pipeline at Egbalar	Aug 10, 2020	Land	Sabotage	42
Aug 12, 2020	14" Okordia-Rumekpe Pipeline at Ula-Ikata	Aug 14, 2020	Land	Sabotage	272
Aug 12, 2020	4" Benisede Well 16T Flowline at Ojobo	Sep 11, 2020	Swamp	Sabotage	0.01
Aug 12, 2020	4" Imo River2 - Imo River1 Bulkline at Igiriukwu -Isietitioha – Owaza	Aug 15, 2020	Land	Sabotage	0.5
Aug 15, 2020	12" Imo River1 - Ogale Pipeline at Okohia	Aug 17, 2020	Land	Sabotage	81
Aug 21, 2020	4" Imo River1 Well 36S Flowline at Isietitioha	Aug 25, 2020	Land	Sabotage	0.1
Aug 22, 2020	20" Kolocreek - Rumuekpe Pipeline at Ihuowo	Aug 24, 2020	Land	Sabotage	205
Aug 23, 2020	12" Imo River2 - Ogale Pipeline at Igiriukwu -Isietitioha - Owaza	Aug 26, 2020	Land	Sabotage	4
Aug 28, 2020	28" Bomu - Bonny Pipeline at Owokiri	Aug 30, 2020	Swamp	Sabotage	2
Aug 31, 2020	12" Imo River1 - Ogale Pipeline at Ogale	Sep 03, 2020	Land	Sabotage	2

Table 4.9: Showing Oil spill Data for September, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Sep 01, 2020	24" Nkpoku-Bomu Pipeline at Agbeta	Sep 02, 2020	Land	Sabotage	2
Sep 03, 2020	12" ImoRiver2 - Ogale Pipeline at Odagwa	Sep 05, 2020	Land	Sabotage	8
Sep 03, 2020	28" Nkpoku-Bomu Pipeline at Ejamah	Sep 04, 2020	Land	Sabotage	3
Sep 07, 2020	12" Imo River2 - Ogale Pipeline at Umuololo	Sep 09, 2020	Land	Sabotage	61
Sep 08, 2020	8" Agbada 2-Nkpoku Pipeline at Omuohia-Igwuruta	Sep 09, 2020	Land	Sabotage	0.7
Sep 09, 2020	Otamiri Well 7S Flowline at Umuechem	Sep 11, 2020	Land	Sabotage	0.3
Sep 11, 2020	Imo River1 Well 44S Flowline Igiriukwu-Isietitioha	Sep 15, 2020	Land	Sabotage	0.1
Sep 11, 2020	8" Isimiri - Imo River Gate Pipeline at Umuelechi	Sep 13, 2020	Land	Sabotage	37
Sep 12, 2020	Ubie Flow station saver pit at Idu-Ekpeye	Sep 17, 2020	Land	Operational	5
Sep 18, 2020	8" Nkali - Imo River2 Pipeline at Muanyimochi-Odagwa	Sep 19, 2020	Land	Sabotage	2
Sep 25, 2020	16" Egbema-Assa Pipeline at Ekpeagah	Sep 27, 2020	Land	Sabotage	18

Table 4.10: Showing Oil spill Data for October, 2020

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Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Oct 01, 2020	20" KoloCreek-Rumukpe Pipeline at Ihuowo	Oct 03, 2020	Land	Sabotage	84
Oct 04, 2020	8" Nkali -ImoRiver2 Pipeline at Nkali	Oct 06, 2020	Land	Sabotage	4
Oct 13, 2020	14" Okordia - Rumuekpe Pipeline at Akara-Olu	Oct 14, 2020	Land	Sabotage	67
Oct 29, 2020	12" Imo River2 - Ogale Pipeline at Igiriukwu -Isietitioha – Owaza	Nov 01, 2020	Land	Sabotage	202

Table 4.11: Showing Table 4.10: Showing Oil spill Data for November, 2020

Date Reported	Incident Site	JIV Date	Terrain	Cause	Estimated Spill Volume (bbl)
Nov 02, 2020	6" Imo River2 - Imo River 1 Bulkline at Odagwa	Nov 05, 2020	Land	Sabotage	1
Nov 03, 2020	8" Agbada2 - Nkpoku Pipeline at Rukpokwu	Nov 04, 2020	Land	Operational	81

Table 12: Summary of Number of Oil Spills from January – November 2020 base on Cause

Month	Sabotage	Operational	Grand Total
January	11	1	12
February	10	0	10
March	9	6	15
April	19	0	19
May	9	2	11
June	17	1	18
July	14	0	14
August	13	1	14
September	10	1	11
October	4	0	4
November	1	1	2
TOTAL	117	13	130
% Contribution	90%	10%	100%

3.2 Crude Oil Contamination Due to Sabotage, Oil Theft and Bunkering Activities and Its Impacts in the Environment

The result as shown in plate 1 – plate 9 reveals the various forms in which sabotage is perpetrated and its negative impacts on the environment at selected locations in the Niger Delta region. The perpetrators of these acts vandalized the pipe lines transporting the crude oil products and taped directly from the source without minding the damaging effects of the uncontrolled spillage and spread of the crude oil products on the environment. It was observed that in some cases the bunkers steal the crude oil by perforating pipelines, fix valves and hoses to the sea through which they siphoned the crude oil into ship. Plate 10 shows that sabotage, oil theft and bunkering activities caused the environment to be contaminated with crude oil. The condition was worsened by the flood as it increased the spread of the crude oil contamination to other new areas where the sabotage, oil theft and bunkering activities has not been carried out: polluting such environments as aquatic lives and plants were seen dead.

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4. Discussion

4.1 The Menace of Sabotage, Oil Thefts, Illegal Oil Bunkering in the Niger Delta of Nigeria

The study revealed that majority of the oil spills were caused by sabotage and not operational fault. The number of oil spills that occurred from January to November, 2020 as recorded was a total of 130 oil spills, out of which 117 were caused by sabotage and only 13 oil spills were caused by operational faults. This means that 90% of the oil spills were caused by sabotage (vandalizing the oil pipes to enable them tap the crude oil) and just 10% of the oil spills that occurred were cause by operational fault. This finding is in conformity with the report of the Nigeria Natural Resource Charter commissioned (NNRC) that clearly explained that most oil spillages were as a result of oil theft which has impacted negatively on our economy (NNRC, 2018). It was observed that these stolen crude oil were been loaded in tanks and transported to areas that it is sold to

buyers (both local and international). This also is in agreement with the report of Adishi & Hunga, 2017; who posited that illegal bunkering activities were been carried out at different regions of the country and that these stolen crude oil products most times are been shipped out of the country without the approval of the government (Adishi & Hunga, 2017).

4.2 Impact of sabotage, oil theft and illegal bunkering activities on the environment

There is nothing like an “over statement” when describing the negative impacts of these sabotage, oil theft and bunkering activities on the environment. It was observed that the process of vandalising and tapping oil from oil installations led to the damage of oil pipelines; it caused many leakages that caused immense environmental degradation. Farms were destroyed, lands and forests as well (thereby reducing number of land that are used for farming). Spills into water ways, destroyed marine and aquatic lives, plants, animal, resort centres and the pollution of potable water. This is in line with the work of Badejo & Nwilo who pointed out the danger of oil spills on our environment: destruction of aquatic lives, lands, plants and animals (Nwilo & Badejo 2005). There are also reports of contamination of borehole which makes the water undrinkable in the Niger Delta (Enakireru & Irene, 2014; Adishi & Hunga, 2017). This condition of the degradation of the environment has made many poor as the mainstay of their local economy (like fish and farming) is destroyed, and they are now reduced to suffer abject poverty. This also is in conformity with the report of Gaskia who stated that this menace in our dear country Nigeria is very pathetic as thousands of household and families of the Niger Delta are to become impoverished, or have become relegated into poverty as a result of the high degree of the environmental devastation (Gaskia, 2013).

4.3 Impact of sabotage, oil theft illegal bunkering activities on the Nigerian economy

As stated earlier, the worst hit of this menace are the indigenes of the Niger Delta (where the oil is harnessed) and the people who are resident in this region because the mainstay of their economy have been jeopardised due to oil spillages mainly cause by the sabotage, oil theft and illegal bunkering activities, although few are caused by operational faults. They can no longer farm as crops are no longer growing well because of crude oil contamination, neither can they go for fishing games since the waters are polluted and fishes are dying. The interviews conducted during the research revealed how they were pained about the fact that the mainstay of their economy is jeopardised by crude oil contamination and the government seems not to respond to their plights. This findings is also in line with the findings of Enakireru & Irene; Adishi & Hunga who also observed the slow poisoning of the waters of this country and the destruction of vegetation and agricultural land by oil spills which occur during petroleum operations, sabotage, oil theft, and oil bunkering (Enakireru & Irene, 2014; Adishi & Hunga, 2017). In their research report, they also pointed out that since the inception of the oil industry in Nigeria, more than twenty-five years ago, that there has been no sincere and effective effort on the part of the government, let alone the oil operators, to control environmental problems associated with the industry (Enakireru & Irene, 2014). The negative impact of this upsurge on the economy also extends to the government of Nigeria since they now depends majorly on crude oil production to sustain the economy as 80% of the federal government 's revenue, 95% of export receipts and 90% of foreign exchange earnings comes from oil exports (Soremi, T. 2019). With the system of fiscal federalism practiced in the country, where the federal government shares the returns from oil exports with the other tiers of government (state and local governments), there is bound to be an economic meltdown or recession if this menace (sabotage, oil theft, and oil bunkering) is not curbed. This findings is also in agreement with that of Soremi (2019) who also posited that the

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activities of sabotage, oil theft, and oil bunkering impacts negatively on the economy of the country and the Niger Delta people (Soremi, 2019).

4.4 Impact of Sabotage, Oil Theft Illegal Bunkering Activities on the Local and National Security

From the observation made during the period of the research study, it can be deduced that sabotage, oil theft and Illegal oil bunkering activities is a threat to both local and national Security. It is a fearful sight to behold as these youths who were used to perpetrate these acts are usually armed with guns and other sophisticated weapons. The worrying aspect of it, is the fact that the majority of these youths falls within the age bracket of 16 and 40 years: this of course is their productive age. They were so sensitive that they suspect every moves made by any face that is strange to them. Findings from the interviews granted by few of them indicates that, there exists also 'suspicions' among them because they were made up of different groups and so there is this constant conflict and tussle for power. There were days that lives were lost as a result of conflicts among them. The people that resides close to these environs lives in fear as they believe that anything can happen any time. There were also times that the security agents clashed with the bunkers, which led to loss of lives from the bunkers camp and the camps of the security agents. This findings is also in accordance with that of “Garuba” who explained in his research report that apart from the economic loss, negation of investment onshore exploration and production, security risks and damage to equipments, illegal oil bunkering fuels conflict and militancy through increased armed proliferations and drug abuse have destabilized the Niger Delta region (Garuba, 2010).

4.5 The Actors and Operational Mechanisms of the Sabotage, Oil Thefts, Vandalism and Illegal Bunkering Activities in the Niger.

In the course of this research, some of the youths perceived to be leaders among them who granted interview to the research team claimed that they were highly connected and so they are not afraid of any individual. They claimed that, their activities in the Niger Delta involved a convoluted and complex network of relationship that cuts across all levels of the society- including diverse interest. In their words, they claimed that these interests include highly connected personalities from in and out of government (the executive and legislative arms of government), oil companies (including The Nigerian National Petroleum Corporation, NNPC), businessmen, retired and serving security officers (from both military and Paramilitary force) , and militants among others. This is in conformity with what was posited by “Ayanruoh” that the oil theft activities in Nigeria consist of highly placed personalities in our society (Ayanruoh, 2013). In the same vein, in the work of Asuni (2009) as he revealed the main actors involved in these illegal businesses at various levels: -He stated that “*at the local level, Niger Delta youth and community leaders play the leading role. As one moves up the network to the senior echelons, members of the Nigerian military, oil companies' employees, top politicians and retired military officers predominate. At an international level, countries from Eastern Europe, Russia, Australia, Lebanon, Netherlands, France, Senegal, Cote d'Ivoire etc., are all involved. The crews of two bunkering ships- one Filipino, another Ghanaian were recently arrested in Nigeria and shed some light on this shadowy network*”

In line in this direction, Olateju (2013) stressed that: - “*let no one be deceived for the rich, powerful and connected are Nigeria's oil Mafiosi (member of Mafia). Oil theft is a big criminal ring with sophisticated organization and international network. Where will poor people get the millions to buy or rent vessels, bribe customs and get military cover for their operations? Oil theft is not for the poor, it is an extensive racket involving military, security apparatchiks (an official in a large political organization),*

politicians, dubious industrial moguls and oil companies--You don't have to snoop around the communities to find tell-tale signs of oil theft. They are all too impossible to miss; everything is flung out in the open. The communities themselves are complicit in the trade as it provided employment for them". Honestly, it was observed in the cause of our research that, there has been alleged complicity of these illegal businesses in the Niger Delta by the security forces. Even the security agents on the road collect money and free bunkers during the transportation of these product to their destination. Staffs of Multinational Oil Companies have been alleged to be involved in the oil theft.

One other aspect that is worthy of mention is the concept that these bunkers have developed. One of the actors who also granted interview to the team of our researchers claimed that the perceived illegal act is not meant to be illegal as they were only taping from their God given resources. Their ideologies are superb as most of their top leaders are educated. Their tune of language sounds philosophical.

There are various methods in which these illegal operations were observed to be carried out in the Niger Delta. The most popular method for stealing the crude oil is to puncture the pipeline conveying the crude oil products from one point to the other and tap it at the point where it had been punctured. The operational methods used by these actors includes: minor and small-scale pilfering of condensate and petroleum product destined local market, Direct hacking into pipelines or tapping with a hose from well head, Excess lifting of crude oil beyond the licensed amount, using forged bills of lading. This also is in agreement with work of Adegbite (2013), Asuni (2009), Katsouris and Sayne (2013).

5. Conclusion and Recommendation

5.1 Conclusion

Due to the negligence and abandonment of the owners/inhabitants of the land where the crude oil are found by the government for a prolonged time, they were left with no choice than to struggle for their own survival through any means irrespective of the consequences. This has resulted into an increased rate of the activities of Sabotage, oil theft, and illegal bunkering in the Niger Delta region which is now posing threat to the Nigerian economy: as it affects the economy of the local dwellers in the Niger Delta and the National economy at large. There is bound to be an economic meltdown or recession if this menace (sabotage, oil theft, and oil bunkering) is not curbed. These upsurge impacts negatively on the environment as it caused environmental degradation. Farms were observed to be destroyed, lands and forests as well. Spills into water bodies destroyed marine and aquatic lives, plants, animal, resort centres and the pollution of potable water. The oils spills can also contaminate our borehole water. It can be deduced that sabotage, oil theft and Illegal oil bunkering activities is a threat to both local and national Security as the actors of this upsurge are well equipped with sophisticated weapons.

5.2 Recommendations

Based on the findings of this research, it is expedient to bring to the fore the following recommendations in order to curb this menace:

Governmental should formulate policies that is geared towards embarking on mass literacy and educational programmes on poverty eradication as this will re-orient Nigerians and eradicate this concept of "get rich quick syndrome" and thereby sustaining the environment and economy.

The government should embrace and introduce innovative technology into our security service in order to adequately strengthen the military especially the Navy, with the necessary equipments to secure water territories.

The government should develop Sincerity of purpose in the apprehension and prosecution of oil thieves and pipeline vandals to serve as a deterrent to others who might want to indulge in such an activity.

Environmental offences which concern the breach of environmental laws and regulations should be made a strict liability offence.

The government should show transparency and effectiveness on whatsoever money earmarked for the prevention of theft, to produce visible results, and not just merely releasing funds for politicking.

Government should diversify the economy which will shift attention from crude oil and even create job opportunities.

Exposing the sponsors of oil thieves along with their international collaborators. Federal Government agencies such as Department of Petroleum Resources (DPR), Petroleum Equalization Fund (PEF) should work out a model to tackle oil thieves that steal crude by forging crude oil and gas export clearance permit to avoid loading more than the quantity purchased. The Pipeline Product Marketing Company Limited, (PPMC) in collaboration with the exploration and production companies (E&P) should device a more practical and scientific approach through electronic pipeline surveillance to track down oil thieves that steal crude by perforating pipelines, fix valves and hoses to the sea through which they siphoned crude oil into ship.

The government should make relevant laws that have stiffer punishment for oil thieves to serve as warning to those who might have the intention to join this illegal business.

Government should not neglect or abandon the owners of the land where the crude oil are found as this will leave them with no choice than to struggle for their survival through any means irrespective of the consequences.

Government should provide basic social amenities/infrastructures like schools, hospitals, roads, factories (to create employment) , stable electricity etc in the oil producing areas, as this will make the people in these areas have that sense of belonging and not feel neglected by the government.

Poverty alleviation programs should be carried out in the oil producing areas periodically

As a matter of necessity, the government should practice true federalism where the resources will be controlled by the owners of the land and not the reverse where the resources are controlled from Abuja and proceeds from the sales of the crude oil are now shared to the other tiers of government.

The government should introduce state policing which will help a great deal in combating this menace.

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Close-up: 3" Nipple Installed at 12 o'clock position on Pipeline at Idu-Ekpeye. Picture was taken during Joint Investigation 21st April 2020.

Plate 1: Oil Spill caused by Sabotage and its impact on the Environment at Oshika community, Ahoada West LGA, Rivers State.



Overview: Part of spill impact on 14" Okordia - Rumuekpe Pipeline at Ikata. Picture was taken during Joint Investigation of 13th February 2020.



Close-up: Crude oil theft point installed at 12 o'clock position on 14" Okordia - Rumuekpe Pipeline at Ikata. Picture was taken during Joint Investigation of 13th February 2020.

Plate 2: Oil Spill caused by Sabotage and its impact on the Environment at Ikata community, Ahoada East LGA, Rivers State.



Close-up: Failed 2inch ball valve fittings installed at 12 o'clock position on 14" Okordia Rumuekpe Pipeline at Idu-Ekpeye. Picture was taken during Joint Investigation 18th July 2020.

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Overview: Part of spill impact on 14" Okordia Rumuekpe Pipeline at Idu-Ekpeye. Picture was taken during Joint Investigation 18th July 2020.

Plate 3: Oil Spill caused by Sabotage and its impact on the Environment at Idu-Ekpeye community, Ahoada East LGA, Rivers State



Overview: Part of spill impact on 14" Okordia Rumuekpe Pipeline at Edeoha. Picture was taken during Joint Investigation of 27th April 2020.



Close-up: 3" Valve Installed at 12 o'clock position on 14" Okordia Rumuekpe Pipeline at Edeoha. Picture was taken during Joint Investigation of 27th April 2020.

Plate 4: Oil Spill Caused by Sabotage and Its Impact on the Environment at Edeoha Community, Ahoada East LGA, Rivers State.



Overview: Part of spill impact on 14" Okordia - Rumuekpe Pipeline at Edeoha. Picture was taken during Joint Investigation of 1st Aug 2020.



Close-up: 15mm drilled hole installed at 12:15 o'clock position on 14" at Edeoha. Picture was taken during Joint Investigati

Plate 5: Oil Spill Caused by Sabotage and Its Impact on the Environment at

Edeoha Community, Ahoada East LGA, Rivers State.



Close-up: 3" illegal valve with a concrete cast attached to a 3" galv on 20" Kolocreek -Rumuekpe Pipeline at Ihuowo. Picture was t 3rd October 2020.



Overview: Part of spill impact on 20" Kolocreek -Rumuekpe Pipeli during Joint Investigation on 3rd Octob

Plate 6: Oil Spill Caused by Sabotage and Its Impact on the Environment

at Ihuowo at Community, Ahoada West LGA, Rivers State.



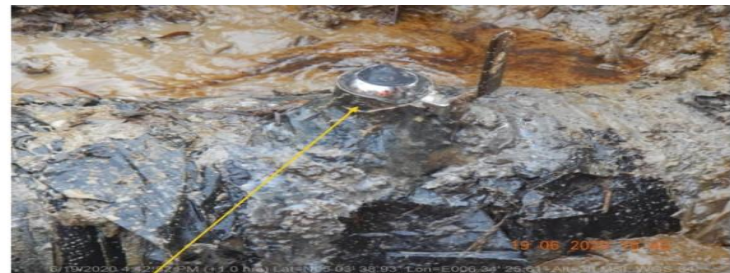
Overview: Part of spill impact on 14" Okordia Rumuekpe Pipeline at Ula-Okobo. Picture was taken during Joint Investigation 19th June 2020.



Closeup 1: Crude Oil theft point installed at 12 o'clock position on 14" Okordia Rumuekpe Pipeline at Ula-Okobo. Picture was taken during Joint Investigation 19th June 2020.

Plate 7: Oil Spill Caused by Sabotage and Its Impact on the Environment at

Ula -Okobo Community, Ahoada West LGA, Rivers State.



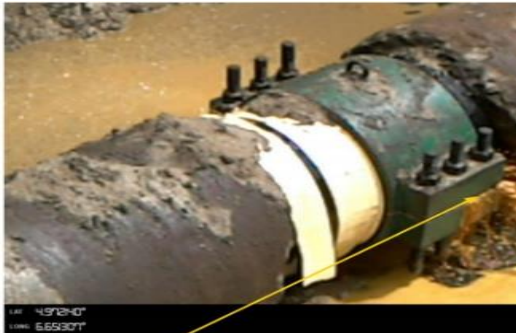
Close-up 2: Crude Oil theft point installed at 12 o'clock position on 14" Okordia Rumuekpe Pipeline at Ula-Okobo. Picture was taken during Joint Investigation 19th June 2020.

Plate 8: Oil Spill Caused by Sabotage and Its Impact on the Environment at

Ula -Okobo Community, Ahoada West LGA, Rivers State.



Overview: Part of spill impact on New 20" Kolocreek - Rumuekpi was taken during Joint Investigation 16th



Close-up: Tampered clamp on New 20" Kolocreek - Rumuekpi taken during Joint Investigation 15th Ju

Crude oil contamination (Oil fumes) spread

Plate 10: Crude oil contamination spread by flood to non-sabotage and non-bunkering Areas During the flood season at Ikata/Ochiba road, Ahoada East LGA of Rivers State.

Plate 9: Oil Spill Caused by Sabotage and Its Impact on the Environment at Okoma 1 Community, Ahoada East LGA, Rivers State.



Crude oil contamination (Oil fumes) spread