

Policy-Optimality Versus Policy-Atrophy in Nigeria's Socio-Economic Development: Evidence from Oil Pipeline Vandalism in the Orashi Region of Rivers State

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Abstract

The study examined the connection between public policy and socio-economic development in the Orashi region of Rivers State by focusing specifically on pipeline vandalism. The research used the public policy failure theory as the analytical framework. The study was structured as a survey research design that is based on three objectives and research questions as well as one hypothesis. The study population included all residents within the four local government areas of the Orashi region in Rivers State. A sample of 1,100 respondents was obtained from four selected local communities across the local government areas through a purposive sampling technique. Data were gathered from primary and secondary sources via questionnaires and personal interviews, as well as existing literature, respectively. The mean and standard deviation were used to analyse the data, while the Pearson product-moment correlation was adopted to test the hypothesis. The findings revealed that pipeline vandalism is caused by deprivation of the oil-producing communities, which has adversely affected government revenue, endangered local and foreign investment, and diverted the funds needed for socio-economic development projects into the provision of security logistics. The study advocated for engagement with critical local stakeholders in oil-producing communities, a reconfiguration of strategies to enhance pipeline security, a reassessment of the terms of engagement between companies and local communities, and the mobilisation of security agencies equipped with appropriate resources to monitor and combat pipeline vandalism, while implementing a system of rewards and penalties for offenders to ensure accountability and discipline among officials.

Keywords: Policy Optimality, Policy Atrophy, Pipeline Vandalism, Socio-Economic Development, Oil Pipeline, Orashi Region, and Oil-Producing Communities

Introduction

No society (including Nigeria) can achieve socio-economic development unless its resources are properly managed for the benefit of the citizenry. Characteristically, human societies are differentially endowed with natural and human resources, such that none of them has attained a condition of autarchy. Fortunately, Nigeria is blessed with strategic natural resources like oil and gas, with a significant deposit located in the Niger Delta area of the country. Ever since it was exploited in commercial quantity, this resource has risen to the pinnacle of national income earners and the lifeblood of the economy and, ironically, has also become an object of contention between the Nigerian government, oil multinational corporations, the local leadership/elite and the indigenous owners of the locales of operation. While the state has taken frantic actions through legislation, projects, programmes, and institutional engagements to guarantee the safety of oil infrastructure in order to reap bountiful benefits from the resources, a large quantity of oil has been syphoned by unauthorised elements through compromising or vandalizing oil pipelines. In fact, Ikelegbe (2005: 208-234) claims that roughly 150,000 barrels of crude oil are stolen daily in Nigeria. Even though most of it goes elsewhere, around a quarter is refined and consumed in the Niger Delta. And as noted by Okonta (2012, pp.1-3), "Unless the problem is better understood and key drivers of

the illegal economy are analysed, the trade could come to undermine the stability of Nigeria's legal oil sector. "Similarly, he viewed it as a semi-structured, informal, flourishing entrepreneurial economy, mostly controlled autonomously along a discrete value chain; it has emerged in Rivers State, as it has throughout the Niger Delta, as a consequence of the escalating oil bunkering and illicit oil refining operations. Mustapha (2019, pp. 1-5) argues that "the chain has five key parts, namely, stage 1 - tap installation; stage 2 - operating the tapping point; stage 3 - supply of stolen crude for export and local refining; stage 4 - local refining into products; and stage 5 - distribution and sale of refined products".

The phenomenon was often thought to originate from and occur in ungoverned remote spaces and be spread by social miscreants, but it has recently made its way into civic areas with the help of government personnel, especially security officers. However, because of the seriousness of the issue, these actions are now punishable by law. Two of the most important statutes in this regard are the Petroleum Production and Distribution (Anti-Sabotage) Act of 1965 and the Miscellaneous Offences Act. According to these statutes, it is considered sabotage to interfere with petroleum product pipelines or production facilities in Nigeria. In response, Abdullahi Muhammadu, the Commandant-General of the Nigeria Security and Civil Defence Corps (NSCDC), announced a jail term of ten years for those found guilty (Vanguard, 2018, October 13). Also, in the midst of the political upheaval in the nation, statutory and non-governmental organisations have emerged in an effort to enforce the current statutes that ban pipeline destruction. The government took a different track, forming paramilitary organisations and ad hoc taskforces and giving them the authority and resources to combat the scourge. A few statutory examples may suffice here, namely, the Nigerian Security and Civil Defence Corps, the Anti-Vandalism Task Force, the Federal Task Force on Crude Oil Theft, the Military Joint Task Force (which includes air, naval, and army security personnel), and Operation Delta Safe (ODA). At the level of non-governmental organisations (NGOs), reference can be made to the Vigilante Group of Nigeria, the National Union of Petroleum and Natural Gas Workers (NUPENG), and the Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN) task forces. Additionally, contracts for pipeline surveillance throughout the Niger Delta have been awarded (Wilcox et al., 2022, p. 207). Even though there are many institutional mechanisms in place to make pipeline vandalism a crime, the practice has persisted in Orashi, Rivers State, and has even spread to more clearly defined civil and governed areas, such as large cities and towns, where it serves as a precursor to the illicit refining of crude oil. In order to provide a proper prognosis, this study thoroughly investigated the policy climate that led to the emergence and continuation of oil bunkering activities, especially pipeline vandalism, and how these impact the economy of Rivers State, particularly, and the country, generally.

Objectives of the Study

1. To ascertain the nature and dimension of pipeline vandalism in the Orashi region, Rivers State.
2. To examine the impact of pipeline vandalism on the socio-economic development of the Orashi region in Rivers State
3. To evaluate the challenges faced by the federal government in curbing pipeline vandalism in the Orashi region, Rivers State

Research Questions

- i. What are the nature and dimensions of pipeline vandalism in the Orashi region, Rivers State?
- ii. How has pipeline vandalism affected socio-economic development in the Orashi region in Rivers State?
- iii. What are the challenges faced by the (federal) government in curbing pipeline vandalism in the Orashi region, Rivers State?

Hypothesis

H₀₁: There is no significant relationship between oil pipeline vandalism and socio-economic development of the Orashi region in Rivers State.

Conceptual Clarification

Public Policy

According to Robert (2019), "the relationship of government unit to its environment" is what public policy is all about. As Dye (1996) puts it, "Public policy is whatever government chooses to do or not to do." A policy is not a choice but an action plan, according to Richard (2018). Public policy is defined by Friedrich (1989) as the intended actions of government within a certain context that includes both possibilities and challenges. The aim of the policy is to achieve a certain target or fulfil a specific purpose. From these explanations, it is easy to see that public policies are decrees made by the government and are the end product of actions taken by the government to achieve various ends. In Nigeria, the policy environment is often laden with policy optimality versus policy atrophy. The former implies the capacity of government to efficiently allocate resources while maximising social welfare. Maznorbalia & Awalluddin (2022) stress that when creating the best policies, factors like decentralisation, cost-benefit analysis, resource scarcity, prioritisation, and political considerations are essential. The latter, in general, is the process by which policies deteriorate as a result of inadequate execution or modification. This decline in governance occurs as a result of poorly implemented policies, a decline in public confidence, and the obsolescence of well-meaning programmes (Etzioni, 1995).

The types of policy vacillate between distributive policies (made to benefit individuals directly, but with no particularly visible cost), redistributive policies (that tend to be highly ideological and emotionally charged for a particular group, involving the transfer of resources from the haves to the have-nots and low partisan visibility, but often tension-orientated) and regulative policies (enunciated by government to control the activities of different groups in society) (see Henry, 2014, p. 31; and Osaro, 2020).

Pipeline Vandalism

When people intentionally destroy public property with criminal or political intentions, it is considered vandalism within the civic domain. Therefore, damaging oil pipelines on purpose to steal petroleum goods or disrupt the government is considered oil pipeline vandalism (Vidal, 2011). According to Onouha (2007), oil pipeline vandalism occurs when someone breaks into an oil pipeline without permission in order to steal crude oil or refined products for their own use or to sell on the black market, thereby breaching supply. According to Omotoso and Omotola (2013), pipeline vandalism occurs when thieves cut off oil supply facilities owned by oil and gas multinational corporations by destroying the pipelines that convey the product. Pipeline vandalism is defined by Udofia and Joel (2012) as the intentional destruction of petroleum pipelines for the purpose of stealing crude oil and related petroleum products.

Nature and Dimensions of Pipeline Vandalism in Nigeria

In Nigeria, the manipulation of oil pipelines and equipment has taken massive proportions. Theft of crude oil and refined products in Nigeria has been characterised by a number of nomenclatures, including oil bunkering, oil theft, fuel scooping, pipeline vandalism, and oil terrorism. Under the general banner of "oil pipeline sabotage", these ideas are discussed in this section as distinct varieties. Oil bunkering, oil pipeline vandalism/fuel scooping, and oil terrorism are the three most prominent types. This article will provide a short overview of each to help illustrate its unique characteristics, trends, procedures, goals, and significant players.

Bunkering of oil: When it comes to the petroleum sector, oil bunkering is by far the most lucrative illicit private enterprise in Nigeria. Bunkering refers to the practice of loading a ship with oil (or coal). Thus, "illegal oil bunkering" is really just a catchphrase for stealing oil, which entails drawing crude oil straight from the pipelines (Human Rights Watch 2003). Due to the extensive network of oil pipelines in the Niger Delta, the dangerous practice of illegal oil bunkering is widespread in the region's waterways. There are two tiers of oil bunkering and oil theft: the mere petty, locally based activities and the more systematic, syndicated, cartel-based ones. In every case, crooked government officials and unscrupulous ship owners lend a hand for it to thrive.

Oil pipeline vandalism / fuel scooping: During the latter years of military administration, it was usual practice to vandalise oil pipelines, especially those carrying premium motor spirit, also called gasoline or fuel, which has

grown to worrisome proportions in Nigeria recently. Pipeline vandalism in the country has three key characteristics: an uptick in the frequency of attacks, an increase in the sophistication of the technology used, and a focus on the three axes that are vital to the distribution of petroleum products in the country. Vandals, mostly young people without jobs in the rural areas where oil pipelines sprout, would break the pipes or use broken ones to steal gasoline and other petroleum products and put them in storage cans, drums, or other containers for sale on the black market in the early to mid-1990s. The technology used was quite crude and rudimentary, consisting of plastic hoses, funnels, and drilling tools for product syphoning. In addition, there were very few incidents of vandalism. To illustrate the point, the number of reported incidents of vandalism increased from seven in 1995 to thirty-three, thirty-four, and fifty-seven in the following three years, respectively (Special Committee on the Review of Petroleum Product Supply and Distribution, 2000, p. 34).

Oil Terrorism: 'Oil terrorism', as opposed to 'oil bunkering' and 'pipeline vandalism', is a term used by academicians and security experts to characterise the intentional assaults on pipeline systems in Iraq and throughout the globe by insurgents, freedom fighters, and militias. Oil terrorism in Nigeria encompasses a wide range of illegal activities, namely, the use of explosives to destroy oil pipelines, installations, and platforms, as well as the seizure of oil facilities like barges, wells, flow stations, support vessels, and crude oil or refined oil processing facilities. In December 2005, the Opobo Pipeline in Delta State was bombed by the Movement for the Emancipation of the Niger Delta (MEND) in Nigeria, marking the first incident of oil terrorism in the country (Ibinabo: 2007, 31-32). In September 2005, militant groups in the Delta region ordered all multinational oil companies to leave the region. This was in preparation for a war with the Nigerian government, following the arrest of Alhaji Asari Dokubo, leader of the Niger Delta People's Volunteer Force and a prominent figure in the Ijaw nation. Thenceforth, terrorists in the area have been targeting the Nigerian economy in an effort to seize a larger portion of the country's oil riches. Crippling the petroleum industry's ability to export crude oil is their overarching goal. Their reasoning is that if the federal government does not get the large funds it needs to run its operations, it will be compelled to address their political, economic, and environmental concerns (Okafor & Olagoke, 2007: 19-20). Their behavior resulted in the following instances: (a) blow-up of a major crude oil pipeline supplying crude to the Forcados export terminal on 16 January 2005, thereby cutting supplies by about 100 000 barrels per day. (b) blow up an oil pipeline operated by an Italian company on 18 March 2005, reducing flow by 75 000 barrels per day. (c) militants' attack Onan oil vessel at Cawthown Channel, killing five soldiers who were escorting the vessel, and later sinking the vessel; on 3 October 2006. (d) attack by the dreaded group, MEND, on three oil pipelines located in Akassa and Twon-Brass on 8 May 2007.

It is evident from the above that the major perpetrators of this sabotage are armed groups, particularly militant groups who profess to be defending the cause of the Niger Delta people. Gradually, but steadily, these militants developed both the tactics and weaponry that enabled them to launch devastating attacks on onshore and offshore oil installations.

Development

According to Akpakpan (1987), it is "the achievement of yearly increases in both the total and per-capita output of goods and services" from a national economic standpoint. Accordingly, a nation is considered to be progressing economically if its GDP increases by 5 to 7 per cent each year on a consistent basis. Just as it is important for development to be well-planned and organised with a roadmap if it goes beyond reducing poverty and unemployment and increasing per capita income, Wilson (2022) argues that this is essential. Thus, development needs a signal that indicates how a nation or people might get from their current state to their desired future state in terms of living standards. Factors like Gross Domestic Product (GDP), life expectancy, literacy rate, and employment rate are used to measure socio-economic progress. We also take into account changes in intangible elements like human dignity, freedom of association, personal safety, lack of fear of physical violence, and level of civil society engagement. It is the responsibility of the state, as part of its governance process, to enact laws (public policies) that encourage technological advancement and social and economic progress (Wilson, 2020). Through strong partnerships across all sectors, corporate entities, and other groups in society, socio-economic

development is envisioned by Chrisman (2014) as a process of social growth that improves people's welfare: improvement in both the social and economic spheres, particularly their standard of living.

Theoretical Framework

Public policy-failure theory is not a single unified “grand theory”, but rather a body of analytical frameworks within policy studies that explains why public policies do not achieve their intended objectives or produce adverse, unintended consequences (McConnell, 2010; Howlett et al., 2015). A public policy is considered to have failed when it does not fundamentally achieve the goals that its proponents set out to accomplish and no longer receives adequate support from stakeholders or yields sustained outcomes over time (McConnell, 2015). Policy failure theory examines the gap between intended policy outcomes and actual outcomes. This includes failures in design, implementation, and evaluation stages, encompassing technical, political, and process dimensions (McConnell, 2010; Howlett, 2012). Policy failure is underpinned by several assumptions: that a policy is assumed to be targeted toward clearly defined, actionable goals, and failure occurs when these goals are not met in practice (McConnell, 2015); that public policies operate in socially and politically complex environments, and assumptions about problem contexts, stakeholder behaviour, and resource availability often falsify real conditions (McConnell, 2015); and that poor implementation, whether due to inadequate planning, weak institutional capacity, or bureaucratic resistance, is often as significant as poor design in explaining failure.

The relevance of the policy-failure theory to the study cannot be underestimated. Firstly, oil pipeline vandalism in the Niger Delta, including Orashi, is partly a symptom of weak or poorly implemented policies related to environmental protection, resource governance, and community development (Allen, 2010; Josiah & Akpuh, 2022). Persistent vandalism indicates that the public policies meant to manage oil infrastructure, protect communities, and deter criminal interference have not achieved their intended socio-economic objectives. Secondly, the theory draws attention to implementation gaps – when the policy design may be sound, but when institutional capacity, funding, or political will is weak (McConnell, 2010; Howlett, 2012). In Nigeria, oil sector policies frequently suffer from implementation atrophy, chronic under-funding, bureaucratic inertia, and governance failures, often leading to continued pipeline breaches and environmental degradation. Thirdly, a core assumption of the theory is that policymakers often misdiagnose the problem, leading to inadequate or misaligned policy instruments (Selznick, 1949; Matland, 1995). Many Nigerian oil policies have neglected ecological limitations such as youth unemployment, political marginalisation, and inequitable local development that, in turn, undermined their effectiveness.

Methodology

The study used a survey research approach. According to the 2022 population projection (NPC/NB, 2022), the total number of people living in the four (4) local government areas that make up the Orashi region in Rivers State is estimated to be 1,411,200. This number constituted the population of the study. The research involved 1,200 participants. The selection of the sample was at the discretion of the researchers because of the delicate and secretive nature of the subject matter. Hence, the purposive sampling technique was adopted to deliberately select respondents who are in one way or the other connected with pipeline vandalism, oil bunkering, and illicit refining of petroleum products. Within the Orashi region of Rivers State, where the scourge is endemic, four local communities, namely Obirikom in Ogba/Egbema/Ndoni LGA, Ogbema in Abua/Odual LGA, Ochiba in Ahoada-East LGA, and Odawu in Ahoada-West LGA, were initially chosen at random. Also picked randomly from each town were 300 individuals with ties to oil bunkering, illicit refining and selling processes that comprise the value chain of pipeline vandalism. Both primary and secondary sources were used to gather the data. Primary data were obtained using a questionnaire designed on a four-point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), which was complemented with personal interviews with respondents from the selected local communities, while the secondary data were sourced from textbooks, journals and internet materials. The data analysis was based on standard deviation, mean statistics and the Pearson Product Moment Correlation (PPMC) to determine the likelihood that the cross-tabulation of two variables was due to random chance. Although

1,200 copies of the questionnaire were distributed (with the aid of two research assistants per community) to the respondents, only 1,100 copies were returned and used to analyse the data.

Data Analysis

Research Question One: What are the nature and dimensions of pipeline vandalism in the Orashi region, Rivers State?

Table 1: Mean and SD responses of the nature and dimensions of pipeline vandalism (N = 100%)

S/NO	Items	SA	A	D	SD	Mean ($\bar{x}$)	SD	N (%)
1	There is a political dimension (deprivation and oil bunkering) to pipeline vandalism in the Orashi Region, Rivers State.	465	235	180	220	2.85	1.16	100
2	There are incidences of oil bunkering in the Orashiregion of Rivers State.	520	180	270	130	2.99	1.09	100
3	The Orashi region of Rivers State is suffering from soot due to pipeline vandalism.	430	350	210	110	3.00	0.99	100
	Grand Mean					2.91	0.51	100

Table 1 indicates that items 1-3 exhibited means and standard deviations exceeding the criterion mean of 2.50. This suggests that the factors identified in these political dimensions (deprivation, oil bunkering and refining of petroleum products for illicit financial flows) significantly contribute to the prevalence of pipeline vandalism and damage to the ecosystem.

Research Question Two: How has pipeline vandalism affected socio-economic development of the Orashi region in Rivers State?

Table 2 shows the mean and SD responses of pipeline vandalism and socio-economic development.

Item	Items' Description	SA	A	D	SD	Mean ($\bar{x}$)	SD	N (%)
1	Security challenges arising from pipeline vandalism are driving local and foreign investors away from the area.	465	235	180	220	2.55	1.16	100
2	Frequent pipeline vandalism has resulted in lossof government revenue meant for socio-economic development (such as roads, schools, and healthcare facilities) in the OrashiRegion.	230	250	280	340	2.33	1.12	100
3	Security challenges of pipeline vandalism are affecting marine transportation and commercial activities in the Orashi Region of Rivers State.	370	280	210	240	2.62	0.90	100
	Grand Mean					2.50	0.90	100

Concerning the growing sense of fear in the Orashi area due to pipeline vandalism, Table 2 shows the average and standard deviation of responses. Pipeline vandalism is a factor contributing to growing insecurity, which has an adverse effect on the socio-economic development of the Orashi region, as evident in the relocation of local and foreign direct investments, growing tension in the waterways, transportation and other commercial activities, and the diversion of funds meant for the building of schools, healthcare centres and roads into the provision of logistics to combat pipeline vandalism and illegal oil bunkering. As shown by items 4 and 6, the mean and standard

deviations are higher than the criterion mean of 2.50. Unlike the criteria mean, the reported mean for item 2 was 2.33 (SD = 1.12).

Research Question Three: What are the challenges faced by the (federal) government in curbing pipeline vandalism in the Orashi region, Rivers State?

Table 3: Challenges of curbing pipeline vandalism in the area.

Item	Items' Description	SA	A	D	SD	Mean (x̄)	SD	N (%)
1	There is security compromise by security agents and complicity of retired personnel that undermine the curbing of pipeline vandalism by the federal government.	370	280	210	240	2.70	1.14	100
2	There is active collaboration between community youth leaders and pipeline vandals in the Orashi region to perpetrate pipeline vandalism.	520	180	270	130	2.99	1.09	100
3	Community chiefs are largely complicit in pipeline vandalism and illegal refining of petroleum products in the Orashi Region of Rivers State.	290	360	220	230	2.64	1.08	100
	Grand Mean					2.78	0.85	100

The grand mean (2.70 > 2.50) was greater than the criteria mean, as shown in Table 3. The mean and standard deviation of all the items were higher than the standard mean. This indicates that the highlighted problems, that is, the compromise of security personnel and complicity between retired military personnel, community leaders and youths in pipeline vandalism and illicit trading of petroleum products, are substantial obstacles that the federal government must overcome in order to resolve the pipeline vandalism issue in the Orashi region.

Test of Hypothesis One

H₀₁: There is no significant relationship between pipeline vandalism and socio-economic development in the Orashi region of Rivers State.

Pearson Product Moment Correlation Analysis

Table 4

Pearson Product Moment Correlation between Pipeline Vandalism and Socio-Economic Development in Orashi Region of Rivers State (N = 100)

Variables	N	Mean	SD	r	Sig. (p)
Pipeline Vandalism	100	2.50	0.90		
Socio-Economic Development	100	2.50	0.90	0.68	0.000

Source: Researchers' Findings, 2025

The Pearson correlation coefficient ($r = 0.68$) indicates a strong positive relationship between pipeline vandalism and socio-economic development in the Orashi Region. The associated probability value ($p = 0.000$) is less than 0.05, which means the relationship is statistically significant.

Discussion

This study has provided important evidence for comprehending the interplay between Nigerian government, security, and socioeconomic dynamics of pipeline vandalism in the Orashi area. This phenomenon has far-reaching consequences for the stability of states and the well-being of their citizens, for which the study was designed to

illuminate the implications. Table 1 shows the data that described the nature and dimensions of pipeline vandalism in the Orashi region of Rivers State. Some of the aspects that are substantially related to it include political dimension – which is derived from the grievances emanating from perceived or real marginalization of the oil-producing communities from the oil economy – oil bunkering, illegal refining of petroleum products and attendant soot, which adversely affected the ecosystem in the Orashi region. Communities in the Niger Delta, where the Orashi area is situated, often see the state as a body that disregards their well-being, as pointed out by Ibeanu (2000) and Olaopa (2015). This view could lead to animosity and, ultimately, vandalism as a reaction to the state's perceived neglect and the exploitation by multinational corporations (MNCs). It is also crucial to include community viewpoints while trying to comprehend pipeline vandalism. Local populations typically see pipeline vandalism as a form of resistance against exploitation, rather than just a criminal act, according to the research. As a result, local residents often see vandalism as a way to regain a sense of power in a setting where their voices have been historically suppressed, as highlighted by Obi (2010). This perspective is in line with social movement theories, which postulate that oppressed communities turn to disruptive behaviours when traditional channels of political expression are closed (Tilly & Tarrow, 2015).

Pipeline vandalism can engender serious monetary ramifications. Both the national and regional economies are impacted by the interruption of oil production. The loss of jobs and investment in the area, according to Akpan (2016), makes poverty worse and perpetuates a cycle of disempowerment. Because of this vicious cycle, communities who are already struggling financially resort to even more vandalism as a means of expressing their frustration. Damage to pipelines may have serious effects on the environment. Damage to local ecosystems and human health may be catastrophic when pipelines are vandalised and oil or gas is spilt or flared. Environmental deterioration, according to Nwilo and Badejo (2005), heightens conflicts between local residents and oil firms while further isolating communities from their natural resources. This ecological component emphasises the interaction between ecological sustainability and community livelihoods, which further complicates the situation. The results in Table 2 point to a causal link between pipeline vandalism and socio-economic development in the Orashi region of Rivers State. It is crucial to think about the bigger picture of these socio-economic issues, as items 4 and 6 show major worries about safety. The findings imply that pipeline vandalism significantly affects socio-economic development in the Orashi region of Rivers State. The positive and strong correlation from the PPMC suggests that as incidents and impacts of pipeline vandalism increase, adverse socio-economic outcomes such as reduced investment, increased government expenditure on security, and disruption of transportation and commercial activities also intensify. This finding reveals that pipeline vandalism is not merely a security issue but a critical developmental challenge that undermines economic growth, public revenue utilisation, and social welfare in the region. The results of the study are congruent with Uguanyi's (2013) stance that the menace of pipeline vandalism has resulted in severe consequences that have led to economic losses, issues of environmental degradation, fire disasters and death of innocent citizens and public officials in the communities concerned. The economic losses associated with oil pipeline vandalism are arrived at by quantifying the monetary value of lost products and the cost of pipeline repairs. Furthermore, in the views of Nasir (2020), the consequences of the scourge of pipeline vandalism usually lead to huge losses of high dimension, for which the repercussions are reflected in budgeting shortfalls across all levels of government and reduction in the 13% derivation funds for oil-producing states, all with the attendant tension in federal/state relations. Between January 2015 and June 2019, the Nigerian government spent over ₦556 billion on the repair and maintenance of oil pipelines across the country (Nasir, 2020). It seems that certain elements of insecurity may be acknowledged, but others may not be seen as directly related to vandalism, based on the lower mean for item 2. This gulf in understanding highlights the need for more extensive public awareness initiatives to teach communities that vandalism has far-reaching consequences beyond monetary damages.

Finally, it is clear from Table 3 above that the federal government is facing substantial difficulties in dealing with pipeline vandalism since the grand mean is higher than the criterion mean. The findings indicate that senior retired military personnel, community leaders and youth are accomplices to this illicit business of pipeline vandalism in the Orashi region of Rivers State, which has made it practically impossible for the federal government to tactically

curb it to its barest minimum. The findings of this study are coterminous with other empirical findings, like Asuni's (cited in Felix & Uthman, 2022), who identified the main players in the illegal business of oil theft and pipeline vandalism at its various levels as follows:

“At the local level, Niger Delta youth and community leaders play the leading role. As one moves up the network to the senior echelon members of the Nigerian military oil company and NNPC employees, top politicians and retired military officers predominate. At an international level, countries from Eastern Europe, Russia, Australia, Lebanon, the Netherlands, France, Senegal, Côte d'Ivoire, etc. are all involved. The crews of two bunkering ships, one Filipino and another Ghanaian, were recently arrested in Nigeria and shed some light on this shadowy network.”

In support of the above position, Olatesu (cited in Felix & Uthman, 2022) argued the following:

Let no one be deceived. The rich, powerful, and well-connected individuals are the Nigerian oil *mafiosi* who encourage oil theft. It is a big criminal ring with sophisticated organisation and international networks. Where will poor people get the millions required to buy or rent vessels, bribe customs officials, and secure military cover for their operations? Oil theft is not for the poor; it is an extensive racket involving the military, security apparatus, politicians, dubious industrial moguls, and oil companies. One does not need to search communities to identify signs of oil theft, as they are openly visible. The communities themselves are complicit in the trade because it provides employment opportunities and benefits for them.

From the foregoing, it is obvious that multiple actors are involved in the scourge of pipeline vandalism in the Orashi region and other regions of Rivers State and the Niger Delta generally.

Conclusion

The vandalism of oil pipelines and its impact on the socio-economic development of the Orashi area of Rivers State was the central theme of this research. There was an analysis of marginalisation and neglect of the oil-producing communities in the developmental plan of the multinational corporation and the federal government; the complicity of retired military personnel, youths and community leaders of the oil-producing rural communities in pipeline vandalism and its socio-economic implications, like excessive spending of the federal government on security surveillance of the region without optimal policy impact; and the closure and winding up of both local and foreign direct investors as a result of insecurity in the Orashi region of Rivers State, among others. According to the findings, some individuals in the neighbourhood are driven to engage in pipeline vandalism due to poverty, hardship, and discontent. Oil spills, the destruction of essential government buildings, and the loss of lives and livelihoods are all societal and economic costs that Nigerian society bears as a result of pipeline vandalism.

Recommendations

The following suggestions are proposed to successfully deal with the difficulties caused by pipeline vandalism:

- i. Given that political deprivation, oil bunkering, and illegal refining significantly contribute to pipeline vandalism and environmental degradation in the Orashi Region, the Nigerian government, in cooperation with the multinational corporations, should implement inclusive development policies that address socio-economic marginalisation of host communities.
- ii. In view of the second finding, the government should enhance integrated security strategies in the Orashi Region. This should include improved surveillance of oil infrastructure and waterways, coordinated security operations, and targeted interventions to ensure that public resources are redirected toward schools, healthcare facilities, roads, and other critical social infrastructure.

- iii. Since the study revealed that security compromise and collusion involving security personnel, retired military officers, community leaders, and youths constitute major obstacles to curbing pipeline vandalism, the federal government should pursue comprehensive institutional reforms. This should involve strict accountability measures, prosecution of complicit actors regardless of status, enhanced oversight of security agencies and structured community engagement frameworks that discourage collaboration with pipeline vandals in the Orashi region of Rivers State.
- iv. In addition, regulatory agencies should intensify monitoring and enforcement to dismantle illegal refining sites and illicit financial networks associated with oil theft, while providing legitimate economic alternatives for affected populations.

References

- Adeleke, A. (2016). Pipeline vandalism and security challenges in Nigeria: An analysis. *African Security Review*, 25(3), 234-250.
- Akpakpan, E.B. (1987) *Crossroads in Nigerian development*. New Generation Publishers
- Akpan, W. (2016). The economic impact of pipeline vandalism on local communities in the Niger Delta. *Journal of Nigerian Economic Studies*, 5(2), 45-61.
- Allen, F. (2010). *Implementation of oil-related environmental policies in Nigeria: Government inertia and conflict in the Niger Delta*. Cambridge Scholars Publishing.
- Chrisman, H. H., Johnson, D. R., & Brookes, M. (2014). *Vandalism: Research, prevention, and social policy*. Delking's press.
- Dollard, J., Leonard, W. & Robert, R. S. (1939). *Frustration and aggression*. Yale University Press.
- Dye, T. (1996) *Understanding public policy*. Prentice Hall, Inc.
- Etzioni, A. (1995). Moral atrophy in the welfare state. *Policy Sciences*, 28(3), 189–195.
- Felix, A. & Uthman, A. A. (2022) Pipeline Vandalism and Its Implications on the Environment: The Ogoni Experience. *FUOYE Journal of Criminology and Security Studies (FJCSS)*, 1(2), 2790-3246.
- Henry, O. (2014) *Public policy analysis: Concepts, issues and cases*. Imprint Services.
- Howlett, M., Ramesh, M., & Perl, A. (2015). *Studying public policy: Policy cycles and policy subsystems* (4th ed.). Oxford University Press.
- Human Rights Watch (2003). Illegal oil bunkering, November. Available at <http://www.hrw.org/reports/2003/>
- Ibeanu, O. (2000). The Niger Delta and the politics of resource control. *Review of African Political Economy*, 27(84), 287-299.
- Ibeanu, O., & Ibrahim, J. (2008). Oil and the Niger Delta: A people's history *In the Nigeria of our dreams: A critique of the governance crisis* (pp. 115-130). Nigerian Institute of Social and Economic Research.
- Ibinabo, J (2007, June 4). Port Harcourt gunmen. *The News*.
- Ikelegbe, A. (2005). The economy of conflict in the oil-rich Niger Delta region of Nigeria. *Nordic Journal of African Studies*, 14(2).
- Inyang, D.T. (2020). The political ecology of the Niger Delta crisis and the prospects for lasting peace in the post-amnesty period. *Global Journal of Human Social Science*, 13(3), 38-40.
- Josiah, U. G., & Akpuh, C. C. (2022). Multinational oil corporations, policy violations and environmental damage in Rivers State of Nigeria: A theistic ethics approach. *Humanities and Social Sciences Communications*.
- Maznorbalia, A. S., & Awalluddin, M. (2022). The elements of optimal public policy. *Journal of Social Research and Behavioural Sciences*, 8(6), 187-197.
- McConnell, A. (2010). What is policy failure? A primer to help navigate the maze. *Public Policy and Administration*, 30(3–4), 221–242.
- McConnell, A. (2015). *Policy success, policy failure and grey areas in-between* [PDF]. PSU | Portland State University
- Mustapha, A. K. (2019). Oil pipeline sabotage in Nigeria: Dimensions, actors and implications for national security. *African Security Review*, 17(3).

- Nasir, J. (2020) "Analysis: N556bn Spent on Oil Pipeline Repairs since 2015 – Nigeria Losing Trillions to Vandals" *African Journal for Security and Development* 3(1).
- National Population Commission (2022). *National population projections*. NPC Bulletin
- Nwankwo, E. (2019). From security to development: Rethinking Nigeria's response to pipeline vandalism. *Nigerian Journal of Policy and Development*, 13(1), 19-35.
- Nwilo, P. C., & Badejo, O. (2005). Oil spills and their environmental impacts in the Niger Delta. *Environmental Monitoring and Assessment*, 101(1-3), 59-70.
- Obi, C. (2010). Oil extraction, dispossession, and resistance in Nigeria's Niger Delta. *Journal of Contemporary African Studies*, 28(4), 401-421.
- Okafor, C & Olagoke, A (2007). Militants free 24 Filipino hostages. *The Guardian*, 14 February
- Okeowo, A. (2012). The politics of oil in Nigeria: The impact on local communities. *African Journal of Political Science*, 7(1), 17-34.
- Okoli, A.C. & Orinya, S. (2013). Oil pipeline vandalism and Nigeria's national security. *Global Journal of Human Social Science Political Science*, 13(5), 56-75
- Okolo, S. (2022) *Public policy in theory and practice*. Open University Press.
- Okonta, A.C.(2021). Oil pipeline vandalism and Nigeria's national security. *Global Journal of Human Social Science*, 13(5), 89-93.
- Okoromadu, F.C. (2020). Poverty, pipeline vandalisation/explosion and human security: Integrating disaster management into poverty reduction in Nigeria's *African Security Review* 6(16), 97-100.
- Omotoso, O. (2016) Political economy diagnosis of crude oil theft in Nigeria: The way forward. *Mediterranean Journal of Social Sciences*, 5(2), 45-53.
- Onuoha, F.C. (2009). Why the poor pay with their lives: Oil pipeline vandalisation, fires and human security in Nigeria. *Journal of Environmental Management and Disaster Control*, 33(3), 369-389
- Osaro, R.B. (2020) *Policy characteristics*. Praeger Publishers.
- Ovwasa, J. (2014). Pipeline vandalism and environmental degradation in the Niger Delta: A socio-economic perspective. *International Journal of Environmental Science and Development*, 5(4), 315-319.
- Richard, J.A. (2018) *Public policy analysis: Concepts and applications*, Reysin Publishers.
- Robert, F. (2019). *The meaning of development: Eleventh world conference of the society for international development*. Chand Publishers.
- Samson, E., & Stanley, A. (2014). Public policy failures in Nigeria: Pathway to underdevelopment. *Public Policy and Administration Research*.
- Special committee on the review of petroleum product supply and distribution. (2000). *Report*. Federal Government Press.
- Tilly, C., & Tarrow, S. (2015). *Contentious performances*. Cambridge University Press.
- Timi, J. (2017). Local governance and community development in the Niger Delta: Challenges and prospects. *Journal of Public Administration and Policy Research*, 9(2), 19-28.
- Udofia, K. (2012). Vandalisation of oil pipelines in the Niger Delta region of Nigeria. *Canadian Research and Development Center of Sciences and Culture* 3(6), 78-89.
- Ugwanyi, E. (2013), "Steaming Vandalism Theft in Downstream Sector" nation. Wet news: n/Business/Energy/Steaming-Vandalism-theft-in-downstream-sector.
- Uwujaren, J. (2018). The intersection of environmental justice and community resistance in the Niger Delta. *Journal of Environmental Management*, 23(12), 128-137.
- Watts, M. (2008). *Curse of the black gold: 50 years of oil in the Niger Delta*. The Institute for Human Rights and Business.
- Wilson, G. (2022). *Nigeria's quest for development: A journey without a roadmap* (Inaugural Lecture Series No. 41). Ignatius Ajuru University of Education. Pearl Publishers International Ltd.
- Wokekoro, S. (2013). Militarisation and community conflict in the Niger Delta. *Peace Studies Journal*, 6(1), 45-63.