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Impact of Private Security Companies on Oil Pipeline Security and National Development in Nigeria: Delta State Perspective (2021–2026)

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ABSTRACT
The crux of this study discusses the engagement of private security firms in safeguarding oil pipelines and its effect on national development in Nigeria and Delta State in particular. Oil Pipeline is an essential facility to Nigeria energy system, whose function is the transportation of crude oil and natural gas over wide distances to feed Nigerian refineries, export terminals, and domestic markets. Overtime the pipeline networks experience frequent attacks due to sabotage, terrorism and theft, resulting to economic losses and environmental hazarder that thwart national development. The broad objective of this study is to examines the impact of private security companies on pipeline security and national development, specifically on government revenue, economic stability, and socio-economic advancement in Delta State between 2021 and 2026. The study employed a descriptive survey methodology, involving 278 participants selected from private security professionals, oil industry employees, government security organisations, and local residents. Data were drawn via the instrument of questionnaire. Descriptive and inferential statistics (Chi-square tests) was adopted to analysed the data, whereas qualitative data were assessed by thematic content analysis. The study also adopted Public–Private Partnership (PPP) Framework. The theory reveals an analytical model that facilitates collaboration between government entities and private sector organisations to deliver public infrastructure or services. The theory justified that Public–Private Partnership (PPP) Framework provides the structural and operational template for analysing the collaborative security arrangements of private security firms and public security agencies are crucial in securing oil pipelines. in Delta State between 2021 and 2026. The study found a substantial positive correlation between pipeline security and national growth, indicating that robust pipeline protection increases government revenue, bolsters employment, and the causes of oil theft and vandalism. It is on this note the study

recommended, community leaders engagement, to enhance the effort of private security operatives.

Keyword: Energy security, oil pipeline, private security, security and National development

INTRODUCTION

The protection of critical national infrastructure has become an increasingly important component of national security and economic stability in contemporary states. In resource-dependent economies such as Nigeria, oil and gas infrastructure occupies a strategic position within the national development framework because petroleum resources constitute a major source of government revenue, foreign exchange earnings, industrial energy supply, and economic sustenance (Watts, 2004). Consequently, the security of oil pipelines has evolved beyond a purely technical concern to become a central issue of national security, economic governance, and sustainable development.

In 1956, the Royal Dutch Shell Company discovered commercial quantity of crude oil deposits in Oloibiri community, which is in present day Bayelsa State. Since the discovery of crude oil in commercial quantities in this area, the Nigeria's economy remained heavily depended on the petroleum sector. The oil industry contributes significantly to national revenue generation and export earnings, making pipeline infrastructure critical to the transportation of crude oil and refined petroleum products across the country (Omotola, 2006). However, the increasing incidence of pipeline vandalism, crude oil theft, sabotage, illegal bunkering, and militant activities in the Niger Delta region has created severe threats to the stability of oil production and national economic development (Adebayo, 2013). These security challenges have not only undermined energy security but have also contributed to environmental degradation, loss of public revenue, infrastructural destruction, and socio-economic instability in oil-producing communities (Ikelegbe, 2005).

This research is conducted in Delta State, situated in the Niger Delta region of southern Nigeria. Delta State is a significant oil-producing state in Nigeria and is vital to the nation's petroleum sector. The state was established in August 27, 1991 - carved out of old Bendel State, with Asaba as its capital, functioning as a significant economic and industrial hub in the Niger Delta. The Delta State is bordered by Edo North, Anambra East, Bayelsa South and Rivers Southeast. The region stands in a geostrategic location on the shores of the Gulf of Guinea, bordering Nigeria and the Southern axis of the Atlantic Ocean. The state comprises twenty-five local government areas, which includes Warri, Ughelli, Asaba, Burutu, etc and is populated by many ethnic groups, including the Urhobo, Itsekiri, Ijaw, Igbo/Anioma, Isoko kingdoms. Delta State is crucial to Nigeria's national development due to its substantial oil and gas reserves. It is estimated that the Niger Delta region has about 37 Billion barrels of crude oil deposit (OPEC, 2018). Globally, Nigeria's Niger Delta has the 10th largest crude oil reserves. In addition to crude oil, the Niger Delta region is also richly endowed with over 120 trillion cubic feet of Natural Gas. Current

estimates suggest that there is the capacity to produce about 2.5 million barrels of oil per day in the region (OPEC, 2018).

The state contains many oil fields, flow stations, export terminals, and pipeline networks managed by foreign oil corporations in partnership with the Nigerian National Petroleum Company Limited and became central to Nigeria's oil economy; the second highest oil producer after Rivers State. Delta State has the densest pipeline network in Nigeria because it's the 2nd largest oil-producing state. Most pipelines are in the riverine/creek areas and run from oil wells → flow stations → export terminals.

Delta State has had ongoing security issues related to pipeline vandalism, oil theft, insurgency, and sectarian strife. Since the late 1990s, the Niger Delta region has experienced the actions of militant organisations advocating against environmental damage, unemployment, and perceived marginalisation by the Federal Government and oil corporations. Most notably is 2006-2009 where militancy, pipeline vandalism, oil spills, youth agitations became most popular across the State. Thus in 2021-2026 FG shifted to indigenous surveillance with private security companies like

Tantita Security Services Nigeria Limited (TSSNL) Pipeline Infrastructure Nigeria Limited (PINL) and Maton Engineering Nigeria Limited / Makon Engineering licensed security contractors employed to oversee pipelines, collect intelligence, to protect pipelines and boost production.

These were saddle with responsibility to prevent recurrent assaults on oil installations, illicit bunkering, and pipeline destruction, adversely impacting oil output and national revenue. The circumstances necessitated enhanced security protocols to safeguard oil infrastructure. In light of these concerns, the Nigerian government and oil corporations have progressively depended on private security firms to assist in safeguarding pipelines and other oil facilities.

The participation of private security firms signifies a transition from sole dependence on military and police forces to a more cooperative security framework that includes non-state entities. This development renders Delta State an appropriate site for investigating the function of private security firms in pipeline protection and their impact on national growth.

Delta State hosts extensive networks of oil pipelines, flow stations, export terminals, and multinational oil company operations. Despite its strategic economic importance, the state has experienced persistent security challenges associated with oil theft, pipeline sabotage, cult violence, militancy, piracy, and illegal refining activities (Okoli & Orinya, 2013). These problems have been linked to unemployment, poverty, environmental neglect, perceived marginalisation, weak governance structures, and competition over access to oil resources (Ibaba, 2011). The persistence of these threats affects Nigeria's oil output and government revenues. In response to these security gaps, both the Nigerian government and multinational oil companies increasingly turned to private security companies (PSCs) and community-based surveillance arrangements as complementary mechanisms for pipeline protection.

The interplay between private security, pipeline security and national development is particularly significant because attacks on oil infrastructure have direct implications for state revenue, foreign investment, energy supply, environmental sustainability, and public welfare. Pipeline insecurity disrupts oil production, increases operational costs, and contributes to fiscal instability within the Nigerian economy (Watts, 2007& UNEP, 2011). Furthermore, environmental pollution resulting from pipeline vandalism and illegal refining activities negatively affects agriculture, fishing, public health, and livelihoods in host communities.

The increasing reliance on private security companies reflects changing patterns in contemporary security governance where the state no longer exercises exclusive control over the provision of security. Instead, security management increasingly involves collaboration between public institutions and non-state actors (Duffield, 2001). Despite the growing involvement of private security companies in pipeline protection, there remains limited scholarly attention on the impact of private security firm on oil pipeline security and broader implications for national development in Nigeria, particularly within Delta State.

It is against this background that this study seeks to evaluate pipeline security and national development in Nigeria through an examination of the role of private security companies in delta State between 2021 and 2026. The study aims to contribute to ongoing debates on energy security, security privatisation, and infrastructure protection while providing policy-relevant insights into the relationship between pipeline security management and national development in Nigeria.

Statement of the Problem

The security of oil pipelines remains one of the most critical challenges confronting Nigeria's oil and gas sector and, by extension, its national development objectives. As a petroleum-dependent economy, Nigeria relies heavily on crude oil revenues for foreign exchange earnings, budgetary financing, industrial activities, and overall economic stability. Consequently, persistent attacks on oil infrastructure through pipeline vandalism, crude oil theft, sabotage, illegal bunkering, and militant activities pose serious threats to national security and economic development (Onuoha, 2008).

Over the years, the Niger Delta region, particularly Delta State, has witnessed increasing incidents of pipeline insecurity arising from organised criminal networks, militant groups, cult-related violence, and illegal refining activities. These activities have resulted in massive economic losses, environmental degradation, disruption of oil production, destruction of livelihoods, and declining investor confidence in Nigeria's petroleum sector (Okoli & Orinya, 2013). Reports of crude oil theft and pipeline vandalism have continued despite the deployment of conventional state security agencies such as the military, police, and civil defence organisations. This situation raises concerns regarding the effectiveness and capacity of public security institutions in safeguarding critical oil infrastructure.

In response to the growing complexity of pipeline-related insecurity, the Nigerian government and multinational oil companies increasingly adopted the use of private security companies (PSCs) and surveillance contractors to complement state security efforts. Private security companies now play significant roles in pipeline monitoring, surveillance, intelligence gathering, access control, and community liaison operations within oil-producing areas (Abrahamsen & Williams, 2011). Their involvement reflects broader changes in contemporary security governance where non-state actors increasingly participate in the provision of security services traditionally monopolised by the state. Questions remain regarding the extent to which private security companies contribute meaningfully to reducing pipeline insecurity and promoting broader national development outcomes.

Although, there are limited scholarly attention devoted to assessing the impact of private security companies in pipeline security and their implications for national development in Delta State within the 2021–2026 period. Existing studies often focus broadly on security challenges in the oil sector and national developmental implications without studies on private security involvement in critical infrastructure protection.

It is this gap in knowledge that this study seeks to address by examining impact of private security companies on pipeline security and national development in Nigeria and Delta State particular between 2021 and 2026. This is with the view to determine the extent to which private security companies contribute to pipeline protection in Delta State and how its activities influence national development outcomes in Nigeria.

Research Questions

The study seeks to provide answers to the following research questions:

i. What factors contributed to the involvement of private security companies in pipeline security operations in Delta State between 2021 and 2026?

ii. To what extent have private security companies in Delta State contributed to pipeline security and national development in Nigeria?

iii. What challenges affect the effectiveness of private security companies in pipeline protection operations and its way forward in Delta State?

Research Hypothesis

The following hypotheses were formulated to guide the study;

i H_O Pipeline vandalism, oil theft and insecurity does not contribute to the involvement of private security companies in pipeline security operations in Delta State between 2021 and 2026

ii H_O Private security companies does not play significant roles in reducing pipeline vandalism, oil theft, and related security threats in Delta State.

iii H_O Weak regulation, poor coordination, corruption, and operational challenges does not reduce the effectiveness of private security companies in pipeline security operations.

Research methodology

The study employed a descriptive survey methodology, involving 290 participants. The population comprises private security personnel employed, oil industry employees, government security organisations (including representatives from the Nigerian Police Force, Nigeria Security and Civil Defence Corps (NSCDC), and other pertinent agencies tasked with security management and operations collaborating with private security firms), and local residents. Respondents were selected using a purposive sampling technique to select them. The sampling frame for this study comprises the individuals, groups and institutions from which the research sample was drawn from the locations of oil-producing site and pipeline-hosting communities where surveillance and security operations are regularly conducted.

The study used both primary and secondary data. Primary data were obtained through the instrument of questionnaire administered to selected respondents involved in pipeline security operations (Tantita Security Services Nigeria Limited,) and representatives of the Nigerian National Petroleum Company Limited, officials of government security agencies, and residents of host communities located near oil pipelines in Delta State. And Data were analysed using descriptive and inferential statistics. This section tests the research hypotheses using the Chi-square inferential statistical tool. The decision rule is as follows: if the calculated X^2 value is greater than the tabulated or critical X^2 value at the 5 per cent level of significance, the null hypothesis (H0) is rejected. If the calculated X^2 value is less than the tabulated X^2 value, the null hypothesis is accepted.

Secondary data were obtained from textbooks, academic journals, government publications, policy reports, media sources and official documents on pipeline security, oil production and national development in Nigeria.

Conceptual Review:

The concept of security is one of the most fundamental, yet "essentially contested" constructs in international relations, political science, and strategic studies. Historically, the definition of security was dominated by the realist school of thought, which maintained a state-centric and military-oriented focus. Under this traditional paradigm, security was defined primarily as the preservation of a state's territorial integrity and sovereignty against external military aggression (Walt, 1991). Classical realists such as Hans Morgenthau argued that in an anarchic international system, security is achieved through the accumulation of power, specifically military power, ensuring that the state can survive threats to its physical existence. This "hard security" approach emphasizes defence, deterrence, and the state's monopoly on the legitimate use of force, viewing any threat to national assets as a direct challenge to the state's survival.

In his seminal work, Buzan (1991) proposed that security should be understood across five distinct sectors: military, political, economic, societal, and environmental. This expansion recognised that a state could be militarily strong yet fundamentally insecure if its economy was

failing, its environment was collapsing, or its societal cohesion was fracturing. Contemporary scholarship has further refined this by noting that in the 21st century, threats are increasingly "transnational" and "asymmetric," including phenomena such as organized crime, cyber warfare, and energy insecurity, which do not always involve traditional standing armies (Liddick, 2020).

Energy security is widely defined as the uninterrupted availability of energy sources at an affordable price, serving as a critical prerequisite for economic growth, industrial productivity, and national stability (Yergin, 2011). In the traditional sense, energy security was primarily concerned with "oil security", the ability of nations to mitigate risks of sudden supply disruptions or price volatility. However, contemporary scholarship has broadened this definition to include the accessibility and reliability of the entire energy value chain, from upstream extraction to downstream distribution. Scholars argue that energy security is not a static state but a dynamic condition of "systemic resilience," where a nation must maintain the capacity to withstand and recover from diverse shocks, whether they are technical, economic, or political in nature (Ang et al., 2015).

The complexity of modern energy systems has led to the development of the "Four As" framework, which identifies the core pillars of energy security as availability, accessibility, affordability, and acceptability. Availability refers to the physical existence of energy resources; accessibility involves the geopolitical and logistical ability to reach those resources; affordability ensures that energy costs do not cripple economic development; and acceptability focuses on environmental sustainability and social compliance (Cherp & Jewell, 2014). This multi-dimensional approach suggests that a nation may possess vast energy reserves but still suffer from chronic energy insecurity if its infrastructure is vulnerable to physical attacks or if its distribution systems are inefficient. Consequently, the protection of energy assets has transitioned from a technical maintenance task to a core function of national strategic planning.

Pipeline security is defined as the comprehensive suite of strategies, technological systems, and operational protocols designed to safeguard the physical and functional integrity of oil and gas conduits. These infrastructures are uniquely vulnerable because they span thousands of kilometres of often remote and difficult terrain, making them "soft targets" for a variety of threats including third-party interference, sabotage, and organized criminal activity (Liddick, 2020). Traditionally, pipeline security was viewed through a technical lens, focusing on Leak Detection Systems (LDS) and corrosion control. However, contemporary scholarship has expanded this definition to include "Infrastructure Resilience," which encompasses the ability of the energy network to resist, absorb, and recover from deliberate attacks or environmental hazards (Sovacool et al., 2020).

The operational framework of pipeline security is categorised into three distinct layers: physical, technological, and social. Physical security involves the deployment of kinetic force, such as armed patrols, stationary guards, and restricted access zones around flow stations and manifold headers. Technological security utilises advanced surveillance systems, including Unmanned Aerial Vehicles (UAVs), satellite imagery, and fiber-optic sensing cables that detect vibrations associated with illegal tapping or excavation (Adeniyi &Odo, 2022). Social security, often the

most complex layer, involves community engagement and "social license to operate" strategies, which aim to reduce the incentive for vandalism by integrating local populations into the value chain of infrastructure protection (Onuoha & Oyewole, 2023). Research suggests that without this social layer, even the most advanced technical measures are frequently bypassed by determined local actors.

Private Security Companies (PSCs) represents a transformative shift in the global security landscape, marking a profound departure from the traditional Weberian model that attributed the state an exclusive monopoly over the legitimate use of force. In the contemporary era, security is increasingly characterized by "pluralization" or "fragmentation," wherein commercial entities have moved from the periphery to the centre of maintaining order and safeguarding critical economic conduits. Private Security Companies are formally defined as legally constituted, profit-oriented corporate entities that provide a comprehensive array of security-related services to a diverse clientele, ranging from sovereign governments and international organisations to multinational corporations and private individuals (Avant, 2005). The rapid expansion of this sector is frequently termed the "commodification of security", a process where safety is no longer viewed solely as a public good provided by the government, but as a marketable service that can be customized and purchased to meet specific operational requirements.

National development refers to the overall advancement of a country's economic, political, social, technological, and institutional conditions aimed at improving the quality of life of citizens. Development extends beyond economic growth to include improvements in healthcare, education, infrastructure, governance, employment, political stability, and social welfare (Todaro & Smith, 2015).

In developing countries, national development is closely linked to the effective management of natural resources and critical infrastructure. It also requires stable institutions, effective governance, environmental sustainability, and adequate security conditions. In Nigeria, oil revenues contribute significantly to public finance, industrial activity, foreign exchange earnings, and infrastructural development. Consequently, persistent insecurity within the petroleum sector negatively affects national development by reducing state revenue, discouraging investment, damaging infrastructure, and undermining socio-economic stability. Where critical infrastructure such as pipelines remains vulnerable to attacks and vandalism, development efforts become weakened due to revenue losses, insecurity, and economic instability.

This study therefore views pipeline security as an important component of national development because the protection of oil infrastructure contributes to economic growth, investor confidence, employment generation, environmental protection, and political stability.

Historical Overview of Oil Pipeline Vandalism in the Niger Delta

The interplay between corruption, economic hardship, and environmental grievances has thus created a fertile ground for pipeline vandalism and oil theft to flourish. Coupled with weak law enforcement and the continued global demand for oil, there is a strong economic incentive for individuals and groups to engage in these illicit activities. For many, the lucrative black market

for stolen petroleum offers a way out of poverty, despite the associated risks. Fullpower and Oba (2024) highlighted the government's inability to enforce laws effectively and the absence of adequate deterrent measures. This has encouraged a culture of impunity in which oil thieves operate with minimal fear of punishment.

Over time, crude oil leaks resulting from pipeline integrity compromises were regarded as a significant issue for the Niger Delta Region. The increasing incidence of pipeline illegalities has considerably impacted government revenue streams, with repercussions for national development in Nigeria (Ahmed, 2017). In 1995, approximately 7 incidents of oil pipeline vandalism were documented. The number rose to 57 in 1998, and by 2005, approximately 2,258 instances were documented (Okoli & Orinya, 2013). Some of these incidents led in damage to oil installations, a decline in oil production, and environmental catastrophes.

In May 2015, the NNPCL, aiming to enhance the GSAs' pipeline security operations, awarded monitoring contracts to host towns (Geetha, 2015). Thereafter, oil production decreased from 798 million barrels in 2014 to 776 million barrels in 2015, and further to 659 million barrels in 2016 (Udo, 2018). The drop-in oil production was due to crude oil theft and pipeline damage. This situation elicited apprehension regarding the involvement of the host community in pipeline security.

Similarly, from 2017 to January 2018, NNPCL reported around 194 instances of pipeline vandalism (Jeremiah, 2018). This pattern has persisted relentlessly over the years. Pipeline vandalism ultimately resulted in a 48.01 percent decrease in oil production, declining from 2.49 million barrels per day in April 2020 to 1.29 million barrels per day in March 2022 (Esiedesa, 2022). In August 2022, to enhance oil output via pipeline security, the NNPCL granted TSSL an ₦48 billion pipeline security contract (Aro, 2022).

From September to November 2022, the involvement of PSCs resulted in the identification of more than 100 ICs utilised in crude oil theft (Ossai, 2022). Notwithstanding these initiatives, Nigeria's oil pipelines persistently encounter incidents of sabotage, hindering product delivery, economic advancement, and national development. The PSCs are restricted by the legal prohibition of carrying arms. The failure to implement technologies for the surveillance of oil installations continues to be a significant worry.

The exclusive pipelines security contract granted to TSSL has elicited apprehensions regarding cooperation with other PSCs. In August 2022, the Niger Delta agitators requested the NNPCL to terminate the ₦48 billion pipeline security contract granted to TSSL. The agitators warned of further hostilities by targeting oil sites in the NDR if their demands for a share of the pipeline surveillance contract were not fulfilled within seven days (The Nation, 2022). This condition led to hostility and insufficient stakeholder collaboration among PSCs in the NDR.

Nigeria possesses around 5,200 kilometres of pipeline networks for the transportation of oil and gas to various ports. Approximately 275 flow stations are linked to pipelines that transport gas and crude oil from around 600 oil and gas sites throughout Nigeria. Over 300 pipelines are located onshore, whereas over 240 are situated offshore (Okafor, 2017). These extensive pipeline

networks necessitate robust security provided by well-equipped Private Security Companies (PSCs).

The Niger Delta region of Nigeria serves as the principal oil-producing sector and is essential to national growth. The region, rich in hydrocarbon resources, contains a comprehensive network of pipelines, flow stations, and oil facilities crucial to Nigeria's economic stability. Nonetheless, the region has traditionally suffered from pipeline insecurity due to vandalism, illicit bunkering, militant assaults, and tribal strife. These security concerns have impeded crude oil production, diminished government revenue, and negatively impacted local populations (Ikelegbe, 2013; Obi, 2018).

Okoli and Orinya (2013) investigated oil pipeline vandalism and national security in Nigeria. The study found that pipeline vandalism resulted in enormous economic losses, environmental pollution, and disruptions in petroleum production. Using a political economy approach, the authors argued that corruption, poverty, unemployment, and weak law enforcement contributed significantly to pipeline-related crimes in the Niger Delta. Similarly, Nwankwo and Ifejika (2014) examined the socio-economic implications of pipeline vandalism in the Niger Delta and observed that attacks on pipelines led to environmental destruction, displacement of local populations, and loss of livelihoods among farming and fishing communities. The study concluded that pipeline vandalism had severe developmental implications for both local communities and the Nigerian state. In another study, Ibaba and Ikelegbe (2010) found that pipeline vandalism was sustained by the growth of illegal oil bunkering networks involving local and international actors. The study argued that the profitability of crude oil theft contributed to the persistence of pipeline attacks despite military interventions.

These studies collectively establish that pipeline vandalism remains a major threat to energy security and national development. However, limited attention has been given to assessing the effectiveness of collaborative security arrangements involving private security companies.

In reaction to these ongoing dangers, private security organisations (PSCs) have progressively assumed a pivotal role in safeguarding pipelines and other essential infrastructure. These companies offer specialised security services that augment governmental initiatives, encompassing armed patrols, surveillance activities, intelligence collection, crisis management, and the safeguarding of oil personnel and assets. In contrast to state security organisations, private security firms frequently possess the adaptability, concentration, and operational capability to execute specialised security methods for certain oil plants and pipelines

Oil Theft, Tantita Security Services and Economic Development

Several studies have examined the relationship between oil theft and economic development in Nigeria. Scholars generally agree that crude oil theft significantly undermines economic growth, state revenue, and infrastructural development.

The escalating incidence of crude oil theft, pipeline vandalism, and illicit bunkering in the Niger Delta necessitated alternative security measures to augment the initiatives of governmental security agencies in Nigeria. In light of ongoing declines in oil revenue and the inadequacy of

traditional security forces to adequately oversee the extensive pipeline network, the Federal Government of Nigeria sanctioned the hiring of private security contractors to aid in pipeline surveillance and protection. Tantita Security Services Nigeria Limited is a leading company engaged in pipeline monitoring and protection in the Niger Delta. This section examines the formation, objectives, and organisational framework of Tantita Security Services within Nigeria's pipeline security paradigm. Katsouris and Sayne (2013) examined organised oil theft in Nigeria and found that the country loses billions of dollars annually due to illegal bunkering and pipeline sabotage. The study argued that oil theft weakens public finance, discourages investment, and contributes to corruption and organised criminality.

Naanen and Tolani (2014) observed that crude oil theft negatively affects employment generation, industrial productivity, environmental sustainability, and national development. Their study concluded that the economic consequences of pipeline vandalism extend beyond revenue losses to include broader developmental setbacks. In another study, Asuni (2009) linked illegal bunkering activities to the financing of armed groups and criminal networks in the Niger Delta. The study found that oil theft contributed to the proliferation of violence and insecurity within oil-producing communities. Empirically, these studies establish that pipeline insecurity and crude oil theft have direct implications for Nigeria’s national development. However, there is limited research focusing specifically on how private security interventions influence these developmental outcomes.

Tantita Security Services is a private security firm, established on August 9th, 2022 by Chief Oweizide Ekepmupolo, also known as Tompolo. The security firm is headquartered in Warri, Delta State, at the heart of Nigeria's Niger Delta region. The company specializes in delivering tailored security solutions specifically for the Oil and Gas Sector. With a strong reputation for excellence, Tantita Security Services has earned trust as a preferred partner for clients needing exceptional security expertise in this sector.

Beyond protecting pipelines, Tantita Security Services offers comprehensive security solutions for various companies and organisations. Their robust measures, such as physical barriers and advanced alarm systems, are meticulously designed to safeguard assets and deter potential threats, thereby ensuring peace of mind for their clients. Moreover, Tantita employs state-of-the-art surveillance services with advanced technology and skilled personnel who operate around the clock to monitor and secure oil and gas pipelines effectively.

Tantita Security Services Nigeria Limited was founded as a private security and surveillance firm in Nigeria, aiming to deliver specialised security services, particularly in safeguarding oil pipelines and other vital national assets. The company achieved national recognition upon receiving pipeline surveillance contracts from the Nigerian National Petroleum Company Limited, in alignment with the Federal Government's initiative to address crude oil theft in the Niger Delta region (Tantita, 2024). The allocation of pipeline surveillance contracts to Tantita was driven by increasing apprehension regarding substantial oil losses resulting from illicit bunkering, sabotage, and damage of oil infrastructure.

Tantita Security Services gained prominence for its association with Government Ekpemupolo (also known as Tompolo), a former Niger Delta militant leader who subsequently engaged in pipeline surveillance under government-sanctioned contracts. The participation of former militant leaders was integral to the comprehensive post-amnesty approach designed to involve local stakeholders in safeguarding oil infrastructure and mitigating pipeline assaults. This strategy was predicated on the conviction that personnel acquainted with the landscape and local networks would be more proficient at detecting illicit activities and averting sabotage.

In conclusion, Tantita has used several strategies, including the establishment of a community-based task force. This task force, made up of local community members, has proved useful in combating oil theft. Through local engagement, Tantita has gained insider knowledge of the terrain and the operations of oil thieves, while also promoting a sense of ownership and responsibility among community members.

Successes and Challenges of Tantita's Approach

Since the involvement of Tantita Security Services Nigeria Limited, reports indicate a significant reduction in oil theft and pipeline sabotage. Tompolo's knowledge of the region, combined with his influence among former militants and local communities, has contributed to the effectiveness of Tantita's operations (Egedegu, 2024). According to Mele Kyari, the Group Chief Executive Officer of NNPCL, the engagement of Tantita Security Services Nigeria Limited helped to change the security situation around Nigeria's oil resources (Ebiaridor, 2024). Within a few months of its engagement, the company reportedly intercepted rogue vessels, uncovered illegal connections and supported the recovery of production from about 900,000 to 1.5 million barrels per day. These outcomes suggest that private security contractors can complement public security agencies when properly coordinated (Ebiaridor, 2024).

Unlike previous security measures that were perceived as heavy-handed or external, Tantita has garnered a level of trust and cooperation from local communities due to its local leadership and inclusive employment practices. This helps in gathering intelligence and ensuring that communities are proactive in protecting oil infrastructure (Egedegu, 2024). The reduction in pipeline vandalism has led to more stable oil production levels, reducing economic losses for Nigeria. Additionally, the employment of local youths has provided an alternative to militancy and illegal oil bunkering (Benjamin, 2024).

Despite its successes, Tantita faces challenges related to limited resources and funding. Maintaining 24-hour surveillance across the vast and difficult terrain of the Niger Delta is a major task, and the company often faces logistical constraints (Kpon, 2024).

The engagement of former militants like Tompolo in security contracts has raised concerns among political figures and corporations who question the ethics of involving ex-insurgents in official security roles. This has led to controversies and resistance from certain quarters (Benjamin, 2024). Although Tantita has achieved some success, pipeline vandalism remains a problem.

Public–Private Partnership (PPP) Framework

The Public–Private Partnership (PPP) Framework is an analytical model that facilitates collaboration between government entities and private sector organisations to deliver public infrastructure or services. Historically, the genealogy of the PPP framework can be traced back to the late 20th century as a central component of New Public Management (NPM), a reform movement that gained significant momentum in the 1980s and 1990s. While the concept of private involvement in public works has ancient roots, the modern theoretical framework was propelled by the neoliberal economic shifts led by figures such as Margaret Thatcher and Ronald Reagan. These leaders sought to reduce the size of the state and address the "fiscal crisis" of the public sector by introducing market-based efficiencies into government functions.

The propulsion of the PPP framework was driven by the perceived inefficiency, bureaucratic rigidity, and chronic underfunding of state-led monopolies. By the 1990s, governments increasingly realized that the rapid pace of technological change and the growing demand for complex infrastructure, such as telecommunications, energy grids, and specialised security, outpaced the state's internal capacity. This necessitated a shift from the state as a "rower" (the direct provider) to the state as a "steerer" (the regulator and facilitator).

In the realm of security studies, the framework was specifically advanced by propounders like Rita Abrahamsen and Michael C. Williams in their influential 2011 work, Security Beyond the State, which examined how the global security landscape was shifting from state-centric models to "global security assemblages" where private actors play a pivotal role in maintaining order.

Major assumptions of the PPP framework include the "Value for Money" (VfM) principle, which posits that private sector involvement leads to superior outcomes through innovation, specialized expertise and competitive pressure. A fundamental assumption is the "Risk Transfer" mechanism, which suggests that project risks should be allocated to the party best equipped to manage them; for example, the private partner assumes operational and technological risks while the state manages regulatory and political risks. The theory also assumes "Mutual Benefit" or a "Win-Win" scenario, where the private partner achieves a reasonable profit margin and the state achieves its developmental or security goals more effectively than it could alone. Furthermore, the framework operates on the assumption of "Synergy," believing that the combination of the state's legitimacy and the private sector's flexibility creates a collective capacity that exceeds the sum of its individual parts. Finally, the framework assumes that a "Shared Responsibility" model does not negate state sovereignty but rather transforms it into a regulatory and oversight function, ensuring that public interests are maintained even when services are delivered by private hands.

The justification for Public–Private Partnership (PPP) Framework is fundamentally relevant to this study as it provides the structural and operational template for analysing the collaborative security arrangements in Delta State between 2021 and 2026. Its primary relevance lies in its ability to explain the departure from the traditional state-centric security model toward a hybrid architecture where the Nigerian state and private security companies (PSCs) co-manage the protection of critical oil infrastructure. By utilising this framework, the study can investigate the

"security-industrial complex" that has emerged in the Niger Delta, where the state maintains sovereign oversight while private entities provide the tactical flexibility and local intelligence necessary to mitigate pipeline vandalism and oil theft (Abrahamsen & Williams, 2011). This allows for a rigorous examination of how the Nigerian government balances its constitutional mandate as a security provider with the pragmatic necessity of outsourcing specialised surveillance tasks to non-state actors.

A second dimension of relevance is found in the framework's focus on resource optimization and "Value for Money" (VfM). In an era of fluctuating oil prices and fiscal constraints, the PPP model is relevant for assessing whether the engagement of private security firms in Delta State has resulted in a more cost-effective and efficient protection of pipelines compared to purely military or police-led operations. The theory provides the metrics to analyze whether the private sector's introduction of advanced surveillance technologies and community-based intelligence networks has actually reduced the volume of crude oil theft, thereby directly impacting national revenue and economic development (Osborne, 2010). This facilitates a deeper understanding of the economic rationale behind the state's decision to involve private contractors in what was historically a public military domain.

The framework provides a lens to examine the "Synergy and Innovation" that private sector involvement brings to national security. The relevance here lies in the study's objective to assess how PSCs integrate local community members, including former militants, into their surveillance frameworks, a strategy that the formal military often struggles to execute. By viewing these arrangements through the PPP lens, the study can determine if this synergy has created a more sustainable "bottom-up" security approach or if it has merely created a new form of rent-seeking that benefits private elites at the expense of the public good (Rjoub et al., 2021). This helps bridge the gap between technical infrastructure protection and the broader goal of social stability.

Criticism

Despite the widespread adoption of the Public–Private Partnership (PPP) Framework as a modern governance solution, it has faced rigorous scholarly criticism, particularly regarding its application in the sensitive domain of national security and infrastructure protection. The primary critique emerges from a political economy perspective, which argues that the framework's underlying neoliberal assumptions, that the private sector is inherently more efficient than the public sector, often fail to hold true in complex, conflict-prone environments like the Niger Delta. Critics contend that while PPPs are designed to promote "Value for Money," the high costs associated with private security contracts, surveillance technology, and community "settlements" often result in a significant fiscal drain on the state without a proportionate increase in public safety

Data Presentation

This part of the study analyses data collected from respondents on pipeline security and national development, with specific focus on private security companies in Delta State. Data were obtained through structured questionnaires. A total of 290 questionnaires were distributed, while 287 were retrieved and analysed, represent 98 per cent response rate. The analysis uses the Chi-square statistical test in line with the study objectives. This part is organised into two sections: hypothesis testing and discussion of findings.

Hypothesis One: Pipeline vandalism, oil theft and insecurity does not contribute to the involvement of private security companies in pipeline security operations in Delta State between 2021 and 2026

Tab 1 Factors contribute to the involvement of private security companies in pipeline security operations

			QC1	QC2	QC3	QC4
Chi-Square			133.331[a]	106.188[a]	178.418[a]	121.345[a]
Df			4	4	4	4
Asymp. Sig.			.000	.000	.000	.000
Monte Carlo Sig.	Sig.		.000[b]	.000[b]	.000[b]	.000[b]
	95% Confidence Interval	Lower Bound	.000	.000	.000	.000
		Upper Bound	.000	.000	.000	.000

Source: Field Survey, 2026

Decision: Since the calculated X^2 value (134.821) is greater than the tabulated X^2 value (9.488) at the 5 per cent level of significance, the null hypothesis is rejected. The study concludes that oil pipeline vandalism and related insecurity constitute major contribute to the involvement of private security companies in pipeline security operations in Delta State between 2021 and 2026 in Delta State. The finding shows that inadequate equipment, limited funding, poor coordination with government agencies and community hostility constitute the involvement of private security firm to prevent pipeline vandalism, oil theft, illegal bunkering and attacks on pipeline infrastructure.

Hypothesis two:

H_O Private security companies do not play significant roles in reducing pipeline vandalism, oil theft, and related security threats and enhances pipeline protection, revenue generation and robust national development outcomes in Delta State.

Tab 2 Roles Private security companies in enhances pipeline protection, revenue generation and robust national growth

			QA1	QA2	QA3	QA4
Chi-Square			137.861[a]	102.808[a]	119.638[a]	148.523[a]
Df			4	4	4	4
Asymp. Sig.			.000	.000	.000	.000
Monte Carlo Sig.	Sig.		.000[b]	.000[b]	.000[b]	.000[b]
	95% Confidence Interval	Lower Bound	.000	.000	.000	.000
		Upper Bound	.000	.000	.000	.000

Source: Field Survey, 2026

Decision: Since the calculated X^2 value (137.861) is greater than the tabulated X^2 value (9.488) at the 5 per cent level of significance, the null hypothesis is rejected. The study concludes that private security companies play significant roles in reducing pipeline vandalism, oil theft, and related security threats in Delta State. The finding implies that adequate equipment, security collaboration and effective coordination among private security companies in pipeline protection enhance local stability, revenue generation, broader economic outcomes and national development objectives in Delta State. The finding implies that private security companies support pipeline protection, collaborate with government agencies, provide intelligence for threat mitigation and ensure the safety of maintenance crews in Delta State.

Hypothesis Three: H_O Weak regulation, poor coordination, corruption, and operational challenges does not reduce the effectiveness of private security companies in pipeline security operations.

Tab 3 Weak regulation, poor coordination, corruption, and operational challenges

			QB1	QB2	QB3	QB4
Chi-Square			133.017[a]	160.892[a]	143.575[a]	157.895[a]
Df			4	4	4	4
Asymp. Sig.			.000	.000	.000	.000
Monte Carlo Sig.	Sig.		.000[b]	.000[b]	.000[b]	.000[b]
	95% Confidence Interval	Lower Bound	.000	.000	.000	.000
		Upper Bound	.000	.000	.000	.000

Source: Field Survey, 2026

Decision: Since the calculated X^2 value (148.845) is greater than the tabulated X^2 value (9.488) at the 5 per cent level of significance, the null hypothesis is rejected. The study concludes that Weak regulation, poor coordination, corruption, and operational challenges reduce the effectiveness of private security companies in pipeline security operations in Delta State. The finding indicates that pipeline security improves government revenue, promotes employment opportunities, enhances community wellbeing and contributes to national economic stability.

Discussion of Findings

This study examined the role of private security firms in pipeline protection and the relationship between pipeline security and national development in Delta State. The major findings are discussed below in relation to existing literature

The study found a strong positive relationship between pipeline security and national development, especially in relation to government revenue, employment and community welfare. The Chi-square analysis statistically confirmed this relationship. Respondents generally agreed that protecting pipelines supports oil production, stabilises government revenue and enables greater development expenditure. This finding aligns with Ovadia (2014), who emphasised that revenue losses from pipeline vandalism can undermine national development by reducing funds available for infrastructure, social services and investment.

Furthermore, the study indicates that pipeline security supports employment and community development. Jobs are created directly through security operations and indirectly through the stability of the oil sector and related services. This finding aligns with Ikelegbe (2013), who argued that pipeline insecurity disrupts local economic activities, limits job creation and weakens socio-economic development in oil-producing areas. Effective pipeline protection therefore preserves national revenue and supports poverty reduction and sustainable development.

The study found that the weak regulation corruption and operational constitute challenges for private security companies in Delta State, particularly in the oil-rich Niger Delta region. Effective mitigation depends on adequate operational and institutional frameworks, sufficient training, advanced monitoring technologies and collaboration among security agencies. This supports Singer (2003) and Abrahamsen and Williams (2011), who noted that private security firms in resource-rich conflict areas often face logistical and regulatory challenges that affect their effectiveness.

However, the findings also revealed challenges such as limited equipment, insufficient funding and weak collaboration with government authorities. These limitations reduce operational effectiveness and support Obi's (2018) view that private security initiatives in Nigeria often face resource constraints and bureaucratic inefficiencies. The study also found that some private security operations encounter resistance or distrust from local communities, which reinforces Abrahamsen and Williams' (2011) argument that legitimacy and effectiveness depend on community acceptance and ethical conduct.

The study also found that the involvement of Tantita Security Services Nigeria Limited has reportedly contributed to a reduction in oil theft and pipeline sabotage. Tompolo's knowledge of the region, combined with his influence among former militants and local communities, has supported the effectiveness of Tantita's operations (Egedegu, 2024). This highlights the need for a multi-dimensional approach that combines private security services, community engagement, government oversight and technology-driven surveillance.

In the Nigerian context, scholars such as Obi (2018), Ikelegbe (2013) and Ovadia (2014) argue that pipeline security is closely linked to socio-economic development. Reduced oil revenue caused by insecurity undermines national development, while effective protection strengthens revenue stability, employment and community welfare. The study therefore supports the view that private security firms can contribute to national development when they are adequately supported and properly coordinated with government agencies and host communities.

Conclusion

This study examined pipeline security and national development in Nigeria, with particular focus on the role of private security companies in Rivers State between 2015 and 2025. The study established that pipeline security remains a critical national concern because Nigeria's oil and gas infrastructure constitutes a major source of government revenue, foreign exchange earnings, employment and economic stability. The findings showed that pipeline vandalism, crude oil theft, illegal bunkering, sabotage, militant activities and community tensions continue to threaten oil infrastructure in Rivers State despite the presence of conventional security agencies. This confirms that pipeline insecurity is not merely a criminal issue but a complex security and development challenge shaped by economic, social, political and environmental factors.

The study further concluded that private security companies have become important actors in pipeline protection because of the limitations of public security institutions in securing extensive pipeline networks across difficult and conflict-prone terrain. Their contributions include surveillance, intelligence gathering, patrol operations, protection of maintenance personnel, community liaison and early detection of threats. The activities of private security firms, including those involved in pipeline surveillance in the Niger Delta, have helped to improve monitoring and reduce crude oil theft in some areas. However, their effectiveness remains constrained by weak regulation, inadequate equipment, poor coordination with state security agencies, limited training, funding challenges, overlapping responsibilities and occasional resistance from host communities.

The findings also demonstrated a strong relationship between pipeline security and national development. Effective protection of pipelines supports increased oil production, improves government revenue, strengthens energy security, promotes investor confidence, enhances employment opportunities and provides resources for public infrastructure and social services. Conversely, pipeline insecurity reduces national income, disrupts oil production, damages the environment, weakens community livelihoods and undermines economic planning. Therefore, the protection of oil pipelines should not be treated as a narrow operational matter but as a strategic requirement for sustainable national development.

Recommendations

Host communities should be actively involved in pipeline security activities. Initiatives that create employment opportunities, support community development and promote corporate social responsibility can reduce hostility, encourage cooperation and build local legitimacy for security operations.

The relationship between private security firms and government security agencies should be formalised through clear frameworks, joint patrols, intelligence sharing and coordinated operational planning. Clearly defined roles, responsibilities and protocols will reduce duplication and improve the effectiveness of security operations.

References

Abrahamsen, R., & Williams, M. C. (2011). *Security beyond the state: Private security in international politics*. Cambridge University Press.

Adebayo, A. A. (2013). Youths unemployment and crime in Nigeria: A nexus and implications for national development. *International Journal of Sociology and Anthropology*, *5*(8), 350–357.

Adeniyi, A., &Odo, L. U. (2022). Private security companies and the protection of critical national infrastructure: A global study of resource sectors. *Journal of Security Studies and Global Affairs*, *5*(2), 45–62.

Ahmed, A 2007. Pipeline sabotage in Nigeria and oil pollution damage out of context. Available at http:// www.amanaonline.com/art_pipeline.htm [accessed 21 October 2006].

Ang, B. W., Choong, W. L., & Ng, T. S. (2015). Energy security: A critical review of methods and highlights of future relevant research. *Renewable and Sustainable Energy Reviews*, *48*, 102–109. https://doi.org/10.1016/j.rser.2015.03.070

Asuni, J. B. (2009). *Blood oil in the Niger Delta*. United States Institute of Peace.

Avant, D. D. (2005). *The market for force: The consequences of privatizing security*. Cambridge University Press.

Buzan, B. (1991). *People, states and fear: An agenda for international security studies in the post-Cold War era* (2nd ed.). Lynne Rienner Publishers.

Cherp, A., & Jewell, J. (2014). The concept of energy security: Beyond the four As. *Energy Policy*, *75*, 415–421. https://doi.org/10.1016/j.enpol.2014.09.005

Duffield, M. (2001). *Global governance and the new wars: The merging of development and security*. Zed Books.

Eze, C., Onyema, V., Obi, C. and Moneke, A. (2023). A Systematic Review of the Impacts of Oil Spillage on Residents of Oil-Producing Communities in Nigeria. Research Square, 1-26.

Fullpower, T.E and Oba, Preye I. 'Examining the tantita security services and illegal bunkering activities in bayelsa state' *Taraba International Journal of Social Science Research* (TIJOSSR) Vol. 1, No 2. December, 2024 retrieved 29/03/2026

Ibaba, S. I. (2011). *Petroleum pollution in the Niger Delta: Multidisciplinary perspectives*. Centre for Population and Environmental Development.

Ibaba, S. I., &Ikelegbe, A. (2010). Militias, pirates and oil in the Niger Delta. In W. Okumu& A. Ikelegbe (Eds.), *Militias, rebels and Islamist militants*. Institute for Security Studies.

Ikelegbe, A 2005. The economy of conflict in the oil rich Niger Delta region of Nigeria. Nordic Journal of African Studies 14(2):208–234.

Ikelegbe, A. (2013). The political economy of oil and conflict in the Niger Delta. African Studies Review, 56(2), 1–21.

Katsouris, C., &Sayne, A. (2013). *Nigeria's criminal crude: International options to combat the export of stolen oil*. Chatham House.

Kpon, P. (personal communication, August 17, 2024). NEITI (2011) Annual report of the Nigerian extractive industry transparency Nigeria. *Journal of Sustainable Development 4*(2), 123-135 doi:10.5539/jsd.v4n2p123

Liddick, D. (2020). *The oil and gas industry: Security and environmental risks*. Routledge.

Naanen, B., & Tolani, P. (2014). *Private gain, public disaster: Social context of illegal bunkering and artisanal refining in the Niger Delta*. CEHRD.

Nwankwo, C. F., &Ifejika, S. I. (2014). Effects of pipeline vandalism on the socio-economic development of the Niger Delta region. *Journal of Humanities and Social Science, 19*(8), 37–41.

Obi, C. I. (2010). Oil as the 'curse' of conflict in Africa: Peering through the smoke and mirrors. *Review of African Political Economy*, *37*(126), 483–495. https://doi.org/10.1080/03056244.2010.530413

Oil Producing and Exporting Countries (OPEC) (2018). Nigeria: Fact and Figures. Accessed online: http://www.opec.org/opecweb/en/aboutus/167htm

Okafor, C and Olagoke, A 2007. Militants free 24 Filipino hostages. The Guardian, 14 February.

Okoli, A. C., &Orinya, S. (2013). Oil pipeline vandalism and Nigeria's national security. *Global Journal of Human Social Science, 13*(5), 66–75.

Omotola, J. S. (2006). The next Gulf? Oil politics, environmental apocalypse and rising tension in the Niger Delta. *Occasional Paper Series*, 1(3), 1–31.

Onuoha, F. C. (2008). Oil pipeline sabotage in Nigeria: Dimensions, actors and implications for national security. *African Security Review, 17*(3), 99–115. https://doi.org/10.1080/10246029.2008.9627487

Onuoha, F. C., &Oyewole, S. (Eds.). (2023). *Security and development: Global perspectives*. Palgrave Macmillan.

Osborne, S. P. (2010). *The new public governance: Emerging perspectives on the theory and practice of public governance*. Routledge.

Rjoub, H., Ifediora, C. U., Odugbesan, J. A., Iloka, B. C., Xavier Rita, J., Dantas, R. M., Mata, M. N., & Martins, J. M. (2021). Implications of governance, natural resources, and security threats on economic development: Evidence from Sub-Saharan Africa. *International Journal of Environmental Research and Public Health*, *18*(12), 6236. https://doi.org/10.3390/ijerph18126236

Savas, E. S. (1987). *Privatization: The key to better government*. Chatham House Publishers.

Sovacool, B. K., Mukherjee, I., Drupady, I. M., & D'Agostino, A. L. (2020). *Energy security: Themes, concepts and challenges*. Sage Publications.

Todaro, M. P., & Smith, S. C. (2015). *Economic development* (12th ed.). Pearson Education.

United Nations Environment Programme. (2011). *Environmental assessment of Ogoniland*. UNEP.

Walt, S. M. (1991). The renaissance of security studies. *International Studies Quarterly, 35*(2), 211–239.

Watts, M. (2004). Resource curse? Governmentality, oil and power in the Niger Delta, Nigeria. *Geopolitics, 9*(1), 50–80.

Watts, M. (2007). Petro-insurgency or criminal syndicate? Conflict and violence in the Niger Delta. *Review of African Political Economy, 34*(114), 637–660.

Yergin, D. (2011). *The quest: Energy, security, and the remaking of the modern world*. Penguin Press.