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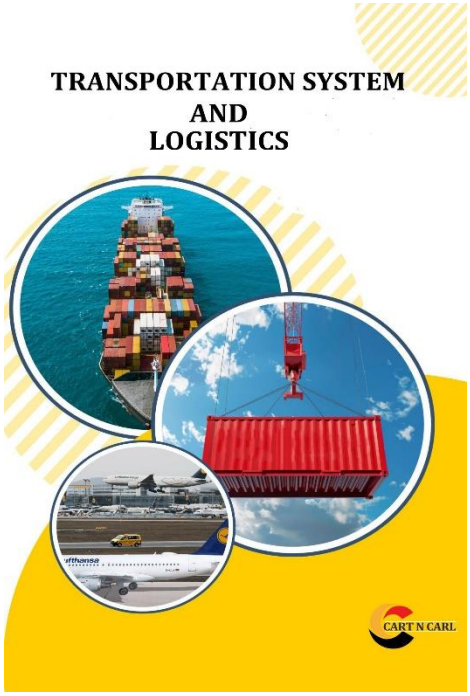

Effectiveness of Naval Operations on Sea Pirates in Nigerian Maritime Environment

Abstract

This study examined stakeholder perceptions of the effectiveness of Nigerian Navy operations in combating sea piracy in the Nigerian maritime environment. Data were collected through a structured survey assessing four key areas: naval patrol deterrence, surveillance technology effectiveness, reduction of piracy incidents along shipping routes, and responsiveness in piracy intervention. Results indicated overwhelmingly positive perceptions, with mean scores ranging from 3.56 to 3.59. Specifically, stakeholders strongly agreed that naval patrols and surveillance technologies enhance early detection and deter pirate activities, while rapid naval responsiveness significantly strengthens piracy intervention efforts. The findings highlight the critical role of an integrated approach combining visibility, technology, and timely operational response in maintaining maritime security. These insights provide empirical support for continued investment in naval capacity and technological enhancement to mitigate piracy risks in Nigerian waters.

Keywords: Naval Patrol, Nigerian Waters, Sea Piracy, Navy, Maritime

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Introduction

The Nigerian maritime environment, situated within the broader Gulf of Guinea (GoG), represents one of Africa's most strategically significant maritime corridors. It accounts for a substantial proportion of West and Central Africa's oil and gas exports, international shipping traffic, and fisheries resources. However, Nigeria's maritime domain has historically been plagued by insecurity, particularly sea piracy, sea robbery, illegal bunkering, oil theft, and kidnapping for ransom. The International Maritime Bureau (IMB) consistently listed Nigeria as one of the global piracy hotspots between 2011 and 2020, contributing significantly to global maritime attacks, especially kidnapping of seafarers. These maritime threats negatively affect Nigeria's economy, increase shipping costs, discourage foreign investments, and undermine national security.

In response to these challenges, the Nigerian Navy (NN), in collaboration with other security agencies such as the Nigerian Maritime Administration and Safety Agency (NIMASA), has developed and implemented a range of naval operations designed to enhance maritime safety and suppress piracy. Operations such as Operation Delta Safe, Operation Tsare Teku, Operation River Sweep, and the technologically advanced Deep Blue Project have aimed to strengthen maritime domain awareness, deter criminal networks, and protect offshore assets. Evidence from IMB's 2022–2024 reports indicates a remarkable decline in piracy incidents in Nigerian waters, suggesting that

that naval operations may be achieving their intended objectives.

Despite these improvements, scholarly debates persist regarding the sustainability and overall effectiveness of these operations, given persistent challenges such as oil theft networks, inadequate naval logistics, socio-economic grievances in the Niger Delta, porous coastlines, and inconsistent regional cooperation. This study critically evaluates the effectiveness of naval operations on sea piracy in Nigeria's maritime environment by examining operational strategies, trends in piracy incidence, and existing maritime security frameworks.

The literature on maritime security underscores the strategic importance of Nigeria's maritime domain, which forms a substantial part of the Gulf of Guinea (GoG), an area consistently ranked among the most volatile maritime regions globally. Scholars and international agencies, including Onuoha (2019), Omodu & Oyetade (2021), and the International Maritime Bureau (IMB), have extensively documented the escalation of sea piracy, kidnapping for ransom, illegal bunkering, and oil theft that dominated Nigerian waters between 2010 and 2020. These maritime threats have significant implications for national security, energy economics, and international trade, given Nigeria's role as a major crude oil exporter in the region.

Conceptually, maritime security refers to the protection of territorial waters, shipping lanes, offshore installations, and seafarers from crimes such as piracy, smuggling, and sea robbery. The United Nations Convention on the Law of the Sea (UNCLOS) defines piracy as acts of violence committed for private ends on the high seas, while sea robbery occurs within territorial waters. This distinction is critical because it determines jurisdictional authority and shapes the nature of naval interventions required.

Theoretical perspectives provide frameworks for understanding the dynamics of maritime crime. Deterrence Theory suggests that criminals are less likely to engage in illegal activities when naval forces are visibly present and capable of apprehension. Routine Activity Theory complements this view by positing that crime occurs when a motivated offender encounters a suitable target in the absence of capable guardians. In this context, naval patrols, surveillance systems, and rapid-response units act as "capable guardians," reducing opportunities for pirates to operate.

Several scholars identify key drivers of sea piracy in Nigeria. Socio-economic deprivation, environmental degradation, unemployment, and political grievances in the Niger Delta region create a pool of individuals susceptible to recruitment by organized criminal networks. Prior to the Suppression of Piracy and Other Maritime Offences (SPOMO) Act of 2019, weak legal frameworks contributed to widespread impunity, enabling pirate groups to operate with minimal risk of prosecution. Nigeria's expansive coastline and labyrinth of creeks further complicate naval surveillance efforts, providing criminals with safe havens and escape routes.

In response, the Nigerian Navy has implemented a range of targeted operations aimed at suppressing maritime crime. Operations such as Operation Delta Safe, Operation Tsare Teku, and Operation River Sweep have enhanced naval presence in piracy-prone waters. The introduction of advanced technological systems particularly the Deep Blue Project, Falcon Eye surveillance system, and Regional Maritime Awareness Capability (RMAC) has significantly improved maritime domain awareness and response time. IMB's 2022–2023 reports show a remarkable decline in piracy incidents, including a near-elimination of ship hijackings and crew kidnappings in Nigerian waters. These improvements are attributed to increased deployment of naval assets, improved inter-agency cooperation with NIMASA, and information-sharing frameworks under the Yaoundé Code of Conduct.

Nevertheless, the literature highlights lingering challenges such as inadequate maintenance of naval fleets, insufficient manpower, limited funding, corruption, and the relocation of pirate networks to neighboring countries a displacement effect known as "crime diffusion." These gaps suggest that while naval operations have made substantial progress, sustained and holistic strategies are required to maintain long-term maritime security.

Method and Materials

This study adopts a qualitative, descriptive, and documentary research design to evaluate the effectiveness of naval operations on sea piracy within the Nigerian maritime environment. The choice of methodology is appropriate because maritime security issues involve operational, legal, and socio-political dimensions that are best understood through comprehensive qualitative analysis. The study relies entirely on secondary data, sourced from the International Maritime Bureau (IMB)

annual piracy reports, Nigerian Navy operational briefs, Nigerian Maritime Administration and Safety Agency (NIMASA) security documents, United Nations Office on Drugs and Crime (UNODC) publications, and scholarly journal articles. These sources provide credible evidence on piracy trends, naval interventions, and maritime security frameworks.

Data analysis is conducted using thematic content analysis, which involves identifying and synthesizing recurring themes such as piracy incidence, effectiveness of naval deployments, role of maritime domain awareness technologies, inter-agency cooperation, and operational challenges. By comparing documented trends before and after major interventions like Operation Delta Safe and the Deep Blue Project, the study assesses changes in piracy levels and response efficiency., internationally recognized data sources and triangulation across multiple documents.

Result and Discussion

The Table 1 presents stakeholders' perceptions regarding the effectiveness of Nigerian Navy operations in mitigating piracy in the Nigerian maritime environment. The survey items measured agreement levels across four points: Strongly Disagree (1), Disagree (2), Agree (3), and Strongly Agree (4). Results indicate a consistently high perception of naval effectiveness across all dimensions assessed. For Q1, "Naval patrols deter piracy through visible presence," 42% of respondents agreed while 58% strongly agreed, yielding a mean score of 3.58. This suggests that stakeholders perceive visible naval patrols as a significant deterrent to pirate activities. Similarly, Q2, "Surveillance technologies enhance early detection of piracy," recorded 44% agreement and 56% strong agreement, with a mean of 3.56, indicating recognition of technological support in proactive piracy management. For Q3, "Naval patrols reduce piracy incidents along shipping routes," 43% agreed and 57% strongly agreed (mean = 3.57), reinforcing the notion that patrol operations directly contribute to safer maritime navigation. Lastly, Q4, "Naval responsiveness strengthens piracy intervention," had the highest strong agreement at 59%, with 41% agreement, producing a mean of 3.59. This highlights the perceived effectiveness of timely naval response in addressing piracy incidents. Overall, the mean scores, ranging from 3.56 to 3.59, reflect a strong consensus among stakeholders that Nigerian Navy operations including patrols, surveillance, and responsiveness play a critical role in deterring and managing piracy in the maritime domain.

Table 1: Stakeholder Responses on effect of Nigerian Navy on Sea Pirates in the Nigerian Maritime Environment

Survey Item	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)	Mean Score
Q1: Naval patrols deter piracy through visible presence	0	0	42	58	3.58
Q2: Surveillance technologies enhance early detection of piracy	0	0	44	56	3.56
Q3: Naval patrols reduce piracy incidents along shipping routes	0	0	43	57	3.57
Q4: Naval responsiveness strengthens piracy intervention	0	0	41	59	3.59

The results indicate that stakeholders perceive the Nigerian Navy as highly effective in combating piracy in the Nigerian maritime environment. All survey items recorded high mean scores between 3.56 and 3.59, reflecting strong agreement on the Navy's role in deterring piracy. This suggests that both operational and technological aspects of the Navy are valued by stakeholders.

Specifically, the high response for naval patrols (Q1 and Q3) demonstrates that the visible presence of naval vessels along shipping routes is recognized as a key deterrent to pirate activities. This aligns with existing literature emphasizing that regular maritime patrols reduce piracy opportunities by increasing the risk of interception for offenders. Similarly, the strong agreement on surveillance technologies (Q2) indicates that stakeholders appreciate the contribution of modern detection systems in early identification and monitoring of piracy threats, enhancing proactive intervention capabilities.

Notably, naval responsiveness (Q4) received the highest proportion of strong agreement (59%), underscoring the

importance of timely intervention once piracy incidents are reported. This highlights that stakeholders consider not only the preventive measures but also rapid operational response critical for reducing the impact of piracy. Overall, the findings suggest a positive perception of the Nigerian Navy's integrated approach combining visibility, technology, and responsiveness as an effective strategy for maritime security.

Comparison with Existing Literature The findings from the stakeholder survey align closely with prior research on naval effectiveness in combating maritime piracy. The strong perception that naval patrols deter piracy (Q1 and Q3) corroborates studies by Onuoha (2010) and Igwe (2016), which emphasized that regular naval presence along key shipping routes reduces pirate attacks by increasing the perceived risk to offenders. These studies also highlight that visible patrols serve as both a deterrent and a confidence-building measure for maritime operators.

Similarly, the recognition of surveillance technologies (Q2) reflects the findings of Oloruntoba and Gray (2016), who reported that early detection systems such as radar, Automatic Identification Systems (AIS), and coastal monitoring networks significantly enhance piracy management by enabling timely intervention. Stakeholders' emphasis on naval responsiveness (Q4) resonates with the work of Chukwuma and Udo (2019), which documented that rapid response capabilities are critical for mitigating losses and preventing escalation of piracy incidents.

Conclusion and Recommendations

The study revealed that stakeholders perceive the Nigerian Navy as highly effective in combating sea piracy in the Nigerian maritime environment. Survey results showed strong agreement that naval patrols, surveillance technologies, and timely responsiveness collectively deter piracy, reduce incidents along shipping routes, and enhance intervention efforts. The consistently high mean scores (3.56–3.59) indicate a broad consensus that the Navy's integrated approach—combining visibility, technology, and operational readiness—is critical for maritime security. Overall, the findings underscore the importance of sustaining and strengthening naval capabilities to ensure the safety of maritime operations and the protection of national economic interests in Nigeria's waters. There is need to;

i. Enhance Naval Patrols: Increase the frequency and coverage of naval patrols along high-risk shipping routes to maintain a strong deterrent effect against piracy.
ii. Invest in Surveillance Technology: Expand the deployment of advanced surveillance systems, such as radar, Automatic Identification Systems (AIS), and drones, to improve early detection and monitoring of piracy activities.
iii. Strengthen Rapid Response Capabilities: Ensure rapid mobilization and coordination of naval units to respond swiftly to reported piracy incidents, minimizing risks to vessels and crew.
iv. Capacity Building and Training: Regularly train naval personnel on contemporary anti-piracy tactics and technological tools to enhance operational efficiency and effectiveness.
v. Collaboration and Information Sharing: Foster greater collaboration between the Nigerian Navy, shipping companies, and regional maritime security bodies to share intelligence and coordinate preventive measures against piracy.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Credit Authorship Contribution Statement

Egbe, I. L.: Conceptualization, Methodology, Formal analysis, Investigation, Resources, Data curation, Visualisation, Project administration, Writing - original draft, Review & Editing. **Wizor, C. H.**: Supervision, Methodology, Validation, Formal analysis, Data curation, Visualisation.

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