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# BLUE ECONOMY AND REGIONAL COOPERATION: NIGERIA'S POLICY ROLE IN THE GULF OF GUINEA

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**Abstract**
The study investigated the nexus between the blue economy, regional cooperation, and Nigeria's policy role in the Gulf of Guinea. Three research questions and three null hypotheses were formulated to guide the study. The study adopted a quantitative research design, data were collected from 145 stakeholders across security, regulatory, diplomatic, and maritime industry institutions, with 121 valid responses analyzed, reflecting an 80.7% response rate. The instrument for data collection was a self-structured questionnaire developed by the researchers, titled: Blue Economy and Regional Cooperation Questionnaire (BERCQ). The instrument was face-validated by experts in the 1Institute of Maritime Studies, University of Nigeria, Enugu Campus. The study utilized multiple regression, moderated regression, and One-Way MANOVA to evaluate the influence of national policies (particularly the Deep Blue Project) and their interaction with the regional Yaoundé Code of Conduct. The findings of the study revealed that Nigeria's maritime policy influence on regional security is weak to moderate; 5.8% of respondents rated the policy impact as very high, 9.9% as high, while 84.4% assessed it as moderate to very low. The findings of the study also revealed that leadership effectiveness in reducing piracy received similarly low ratings, with 42.1% describing it as poor and only 2.5% as very good. Based on the findings of the study, it was recommended among others that policy integration alone is insufficient without enhanced regional cooperation, institutional alignment, and predictable resource allocation to address transnational maritime threats in the GoG.

**Keywords:** Blue economy; regional cooperation; maritime security; nigeria's maritime policy; Gulf of Guinea

## Introduction

The Gulf of Guinea remains one of the world's most strategically important maritime regions, possessing vast ocean resources capable of driving economic growth, regional integration, and sustainable development. However, the region continues to face persistent challenges, including piracy, sea robbery, illegal fishing, maritime pollution, and weak institutional coordination, which have limited the effective utilization of its maritime potential. These challenges have raised concerns about the adequacy of existing national policies and regional cooperative frameworks in promoting maritime security and supporting the sustainable development objectives of the blue economy (Failler, Antaya, & March, 2024).

The oceans are increasingly recognized as the new frontier of development, sustainability, and global governance (Polejack, 2021). Once marginal to national planning, coastal and marine spaces now sit at the center of strategies for food security, climate adaptation, energy diversification, and geopolitical influence. This shift is captured by the concept of the blue economy, which emphasizes the sustainable use of ocean resources for economic growth, improved livelihoods, and healthy ecosystems (Elston, 2024; United Nations Environment Programme, 2024). The blue economy spans fisheries,


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maritime transport, offshore hydrocarbons, marine renewable energy, coastal tourism, biotechnology, and ecosystem services (Jacob and Umoh, 2025). Globally, it generates trillions of dollars annually and provides millions of jobs (United Nations Environment Programme, 2024; Narwal, 2024).

In Africa, the blue economy has become particularly important (Łukaszuk, 2018). The continent's 38 coastal and island states collectively possess a maritime domain nearly equal in size to its landmass, presenting opportunities for trade, food production, energy security and biodiversity conservation (Jacob and Umoh, 2025). Recognizing this, the African Union (AU) positions the maritime domain as a pillar of economic transformation in its *2050 Africa's Integrated Maritime Strategy* (Mathew and Robertson, 2022). Yet this potential is consistently undercut by weak governance, insecurity, illicit exploitation and limited infrastructure. Nowhere are these tensions more visible than in the Gulf of Guinea, a region both richly endowed and persistently vulnerable (Saleh and Munir, 2023). Stretching from Senegal to Angola, the Gulf of Guinea encompasses more than 20 coastal states and occupies a pivotal position in global trade. It serves as a major transit corridor for crude oil and liquefied natural gas exports, as well as a hub for fisheries and coastal commerce that sustain millions of households (Monteh, 2025; UNCTAD Maritime Report, 2023). Yet the region is equally notorious as a global hotspot for maritime insecurity. Piracy, armed robbery at sea, illegal, unreported and unregulated fishing, oil theft and smuggling have plagued its waters for more than a decade (Okafor-Yarwood *et al*., 2024; Adesokan, 2024). By 2020, the Gulf accounted for the majority of global kidnappings of seafarers, displacing the Horn of Africa as the world's most dangerous maritime zone (International Maritime Bureau, 2022).

The Gulf's immense economic promise and entrenched insecurity, poses a profound challenge for sustainable development (Prabhakar, 2025). A thriving blue economy cannot emerge where maritime crime prevails, nor can states realize their coastal advantages without effective governance at sea. In response, regional and international actors have invested in cooperative frameworks. Foremost among these is the Yaoundé Code of Conduct (2013), which links West and Central African states in a common security architecture through information sharing, joint patrols, coordinated enforcement and regional centers for maritime domain awareness (Tanimu, 2025; Adesanya, 2023). Complementary initiatives include the ECOWAS Integrated Maritime Strategy, the AU's 2050 agenda and the Gulf of Guinea Commission, alongside external support such as the European Union's Coordinated Maritime Presences and bilateral capacity-building programs (ENACT-Africa (2025).

Notwithstanding these frameworks, regional cooperation outcomes remain uneven. The Yaoundé system has been hailed as innovative yet criticized for slow implementation, overlapping mandates and uncertain sustainability (Enemuoh, Nwokedi & Enendu, 2022). Many states lack the naval assets or institutional capacity to contribute meaningfully, while others demonstrate limited political will. Coordination often remains symbolic rather than substantive and legal harmonization across jurisdictions is incomplete (Adesanya, 2023). The gap between commitments and results illustrates the difficulty of translating frameworks into action. Within this landscape, Nigeria emerges as the pivotal actor. With the largest economy, population and naval capabilities in West Africa, it is widely considered the anchor state for maritime security and blue economy development (Karani et al., 2022; Gesami, 2023). Offshore hydrocarbons, accounting for over 80% of


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export earnings, make maritime stability a national imperative. Nigeria's coastline, extending more than 800 kilometers, hosts some of Africa's busiest ports and critical oil infrastructure vulnerable to sabotage and theft (United Nations Environment Programme, 2024). Reflecting this centrality, Nigeria has launched ambitious initiatives such as the Deep Blue Project launched on the 10th of June (2021), a US$195 million security program deploying command-and-control centers, naval vessels, aircraft, drones and intelligence platforms to combat piracy and related threats (Jacob and Umoh, 2025; Amos and David,2025). In 2023, the creation of a dedicated Ministry of Marine and Blue Economy signaled a further institutionalization of ocean governance within national policy (Business Day, 2025; Ships & Ports, 2025).

Yet Nigeria's policy leadership presents a puzzle. Despite significant investments, maritime insecurity persists and regional cooperation has not consistently deepened. Piracy incidents declined after the launch of Deep Blue but resurged in some corridors, while unregulated fishing and oil bunkering remain entrenched (ICC IMB Report, 2022). Neighboring states display uneven commitment to joint patrols and the Yaoundé system continues to struggle with sustainability. In effect, Nigeria's dominance and activism have not reliably translated into robust regional cooperation outcomes. This gap between policy input and cooperation outcome is at the heart of this study. Understanding how Nigeria's policies shape, or fail to shapecollective action in the Gulf of Guinea requires both empirical analysis and theoretical engagement. Existing scholarship on regional cooperation provides several lenses. Neo-functionalism predicts that cooperation in technical areas, such as maritime safety, should generate spillovers into broader integration, yet such effects remain limited in the Gulf (Kicha, 2021). Institutionalism emphasizes the role of rules and enforcement mechanisms, but weak compliance undermines institutional effectiveness (Barbar, 2025). Security governance approaches highlight networks, asymmetrical capacities and external actors in shaping outcomes, yet they too fall short of explaining the mixed results of Nigeria's leadership (Udochukwu *et al.*, 2024).

Through placing Nigeria's role at the center, this research interrogates why strong policy initiatives have yielded only partial cooperation. The analytical challenge lies in unpacking the mediating and moderating mechanisms between policy design and collective outcomes. Initiatives such as Deep Blue or the Ministry of Marine and Blue Economy represent policy inputs, but their translation into outcomes depends on mediators like maritime domain awareness, legal harmonization and resource allocation. These, in turn, are conditioned by moderators such as the political will of neighboring states, oil market volatility and the strategic interests of external partners. In short, the effectiveness of Nigeria's leadership is contingent, rather than automatic. Conceptualizing this process allows the study to contribute both to maritime policy debates and to broader theories of regional cooperation. The relevance of this inquiry is amplified by recent developments. Since 2021, Nigeria has accelerated naval modernization, acquiring new patrol vessels and surveillance aircraft (THISDAY, 2025). Regionally, piracy has declined from its 2020 peak, but experts warn that underlying drivers, weak enforcement, corruption and high youth unemployment persist (Creswell and Creswell, 2018). Globally, the COVID-19 pandemic and supply chain disruptions exposed the vulnerability of maritime trade, while climate change continues to threaten coastal livelihoods, underscoring the urgency of blue economy governance (Esin, 2024; Amao, Adesanya, & Ola, 2024)


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The Gulf of Guinea thus sits at the nexus of local, regional and global challenges. This dissertation positions itself at the intersection of these debates. Through examining Nigeria's policy role in the Gulf of Guinea, it addresses a critical gap; the weak empirical and theoretical linkage between policy design and cooperation outcomes in maritime governance. The findings aim to inform both academic debates on regional cooperation and practical policymaking in Nigeria, ECOWAS and the AU. In doing so, the study contributes to the evolving scholarship on the blue economy, regional security and Africa's integration into the global maritime order. Eventually, the Gulf of Guinea represents both a zone of risk and of opportunity (Okafor-Yarwood *et al*., 2024). Its future determination depends on whether Nigeria can transform its maritime policies into regional public goods, catalyzing cooperation that enables sustainable growth of the blue economy. This dissertation seeks to analyze that transformation, its limitations and its implications for theory and practice.

**Statement of the Problem**

The blue economy has emerged as a strategic pathway for sustainable economic development, maritime security, and regional integration among coastal states. In the Gulf of Guinea, effective regional cooperation and coordinated maritime governance are expected to create a secure maritime environment that promotes the sustainable utilization of ocean resources, facilitates trade, reduces transnational maritime crimes, and supports long-term economic growth. As the region's leading maritime power, Nigeria is expected to provide policy leadership capable of strengthening regional cooperation, enhancing maritime security, and advancing the objectives of the blue economy. Ideally, Nigeria's maritime policies and leadership initiatives should foster stronger collaboration among Gulf of Guinea states, encourage harmonized maritime regulations, improve information sharing, support joint security operations, and contribute to a stable maritime domain. Such outcomes would enhance collective capacity to address piracy, illegal fishing, oil theft, smuggling, and other maritime threats while creating an enabling environment for sustainable blue economy development across the region.

However, the reality in the Gulf of Guinea presents a different picture. Despite the introduction of several maritime security initiatives, policy frameworks, and regional cooperation mechanisms, maritime crimes and governance challenges continue to threaten the region's maritime domain. Although some progress has been recorded in reducing reported piracy incidents, concerns remain regarding the sustainability of these gains due to weak institutional coordination, inconsistent policy implementation, inadequate resource allocation, uneven participation among member states, and varying levels of political commitment to regional maritime cooperation. Consequently, the expected benefits of Nigeria's leadership role and policy interventions have not been fully realized across the region. The gap between Nigeria's policy ambitions and the actual outcomes of regional cooperation raises important concerns regarding the effectiveness of existing maritime governance arrangements in the Gulf of Guinea. It remains unclear whether Nigeria's policy initiatives have sufficiently strengthened regional cooperation and maritime security to support the sustainable development objectives of the blue economy. This uncertainty has created both practical and scholarly concerns regarding the mechanisms through which national leadership can translate into effective regional maritime governance. Therefore, the problem of this study was that despite Nigeria's strategic position and numerous policy initiatives aimed at promoting maritime security


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and blue economy development, regional cooperation outcomes in the Gulf of Guinea remained inconsistent and insufficient for addressing persistent maritime threats and advancing sustainable maritime development. This situation necessitated an investigation into Nigeria's policy role in promoting regional cooperation and strengthening maritime governance within the Gulf of Guinea.

**Objectives of the Study**

The general objectives of the study was to examine blue economy, regional cooperation and Nigeria's policy role in the Gulf of Guinea, by analyzing their impacts on cooperation outcomes through mediating mechanisms and moderating conditions. Specifically, the study sought to:

1. assess Nigeria's policy role and leadership in shaping security, economic and institutional cooperation outcomes in the Gulf of Guinea.
2. measure the mediating mechanisms (maritime domain awareness, legal harmonization and resource allocation) through which Nigeria's policies influence regional maritime cooperation outcomes.
3. analyze the moderating influence of Nigeria's political will the control of deep sea Mining Gulf of Guinea.

**Research Questions**

The following research questions were posed to guide the study;

1. How have Nigeria's maritime policies and leadership influenced security, economic and institutional cooperation outcomes in the Gulf of Guinea?
2. To what extent do maritime domain awareness, legal harmonization and resource allocation mediate the effectiveness of Nigeria's maritime cooperation outcomes in the Gulf of Guinea?
3. How does Nigeria's political will in the control of deep sea mining in the Gulf of Guinea promote regional cooperation outcome?

**Hypotheses**

The following Null hypotheses were developed in this study;

**Ho$_1$**: Nigeria's policies and leadership do not affect security, economic performance, or institutional cooperation outcomes in the Gulf of Guinea.

**Ho$_2$**: Levels of maritime domain awareness, legal harmonization and resource allocation does not significantly predict the effectiveness of Nigeria's maritime cooperation outcomes in the Gulf of Guinea.

**Ho$_3$**: Nigeria's Political will of in the control of deep sea mining does not affect the relationship between Nigeria's policies and cooperation outcomes.

**Methodology**

The study adopted a survey research design and was conducted in the Gulf of Guinea, a strategically important maritime region in West Africa. The population of the study comprised 175 experts and key stakeholders drawn from government agencies, regional organizations, international organizations and development partners, security and maritime enforcement agencies, industry associations, non-governmental organizations, and academic and research institutions involved in maritime security, blue economy development, and regional cooperation. Using Cochran's formula for finite populations, a sample size of 121 respondents was determined. The study employed a purposive stratified


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sampling technique to ensure adequate representation of the various stakeholder groups. Data were collected using structured questionnaires and semi-structured interview guides designed to capture information on Nigeria's maritime policies, leadership role, maritime security initiatives, and regional cooperation mechanisms in the Gulf of Guinea. The instruments were subjected to face and content validity through expert review by specialists in maritime governance, research methodology, and regional cooperation studies. Reliability of the questionnaire was established using Cronbach's Alpha, which yielded a reliability coefficient of not less than 0.70, indicating acceptable internal consistency. Primary data were collected through the administration of questionnaires and interviews to selected stakeholders, while secondary data were obtained from policy documents, strategic reports, regional frameworks, scholarly publications, and reports from relevant international organizations. Data were analyzed using Multiple Linear Regression Analysis, Moderated Multiple Regression, and One-Way Multivariate Analysis of Variance. Statistical significance was evaluated at the 0.05 level. The decision rule was that the null hypothesis was rejected when the p-value was less than 0.05 and accepted when the p-value was greater than 0.05.

**Results**

Research Question One: How have Nigeria's maritime policies and leadership influenced security, economic and institutional cooperation outcomes in the Gulf of Guinea?

**Table 1: Frequency of Distribution on Nigeria's Maritime Policy Impact on Economic Cooperation among GoG States**

| Stakeholders | Very Positive Impact | Positive Impact | Neutral Impact | Negative Impact | Very Negative Impact | Total |
|---|---|---|---|---|---|---|
| NIMASA | 0 | 1 | 1 | 5 | 3 | 10 |
| Nigerian Navy | 1 | 0 | 1 | 3 | 2 | 7 |
| Ministry of Marine & Blue Economy | 0 | 0 | 2 | 3 | 1 | 6 |
| Gulf of Guinea Commission | 0 | 0 | 1 | 2 | 1 | 4 |
| ECOWAS Maritime Security Directorate | 0 | 0 | 0 | 3 | 1 | 4 |
| AU Maritime & UNECA | 0 | 0 | 1 | 2 | 0 | 3 |
| International Organizations (UN, DFID, US, World Bank) | 0 | 0 | 2 | 5 | 1 | 8 |
| Industry Associations | 2 | 1 | 2 | 7 | 2 | 14 |
| NGOs and Civil Societies | 1 | 1 | 3 | 4 | 1 | 10 |
| Security Practitioners & Regional Experts | 2 | 4 | 7 | 6 | 1 | 20 |
| Academics & Researchers | 0 | 2 | 4 | 6 | 2 | 14 |
| Development Partners & Donors | 0 | 1 | 2 | 4 | 0 | 7 |


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|---|---|---|---|---|---|---|
| Other Key Stakeholders | 1 | 0 | 1 | 9 | 3 | 14 |
| **Total** | **7** | **10** | **27** | **59** | **18** | **121** |

Data in Table 1 showed that Nigeria's maritime policies and leadership have had a limited influence on security, economic and institutional cooperation outcomes in the Gulf of Guinea. The results showed that only 17 (14.1%) respondents rated the impact as very positive or positive, while 77 (63.7%) perceived it as negative or very negative. In addition, 27 (22.3%) respondents remained neutral. The dominance of negative responses suggests that Nigeria's maritime policies have not substantially improved regional economic cooperation and institutional collaboration, despite the country's leadership role in maritime governance within the region.

**Table 2: Maritime Domain Awareness, Legal Harmonization, Resource Allocation and Effectiveness of Cooperation**

| Questions (Short Label) | Top (%) | High (%) | Moderate (%) | Low (%) | Very Low (%) |
|---|---|---|---|---|---|
| MDA enhances cooperation | 2.5 | 11.6 | 24.8 | 45.5 | 15.7 |
| Effectiveness of information sharing (CRESMAO/CRESMAC) | 5.8 | 9.1 | 27.3 | 47.9 | 9.9 |
| Legal harmonization improves coordination | 5.8 | 11.6 | 25.6 | 44.6 | 12.4 |
| Resource allocation influences success | 3.3 | 10.7 | 32.2 | 35.5 | 18.2 |
| Effectiveness of joint patrols | 4.1 | 12.4 | 27.3 | 42.1 | 13.2 |
| Port efficiency improvement | 5.8 | 14.9 | 28.9 | 36.4 | 14.0 |
| Effectiveness of monitoring & reporting | 8.3 | 10.7 | 28.1 | 38.8 | 14.0 |

Data in Table 2 showed that maritime domain awareness, legal harmonization and resource allocation have had limited effectiveness in enhancing Nigeria's maritime cooperation outcomes in the Gulf of Guinea. Only 14.1% of respondents rated maritime domain awareness as highly effective in promoting cooperation, while 61.2% perceived it as having low or very low effectiveness. Similarly, information-sharing mechanisms received only 14.9% positive ratings, compared to 57.8% negative ratings. Legal harmonization was positively rated by 17.4% of respondents, while 57.0% considered it ineffective. Resource allocation also recorded low positive ratings (14.0%) against 53.7% negative ratings. These findings indicate that the mechanisms expected to facilitate regional cooperation remain weak and insufficiently developed, thereby limiting the effectiveness of Nigeria's maritime cooperation initiatives in the Gulf of Guinea.

**Table 3: Stakeholders' Perceptions of Political Will and Commitment on Maritime Security Outcomes**

| Questionnaires | V. Positive / V. High (%) | Positive / High (%) | Neutral / Moderate (%) | Negative / Low (%) | V. Negative / V. Low (%) |
|---|---|---|---|---|---|
| Political Will Affects Policy Implementation | 5.8 | 7.4 | 26.4 | 42.1 | 18.2 |
| Political Commitment Affects Joint Patrol Compliance | 4.1 | 10.7 | 25.6 | 45.5 | 14.0 |


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| | | | | | |
|---|---|---|---|---|---|
| Political Will Affects Information-Sharing | 4.1 | 12.4 | 30.6 | 36.4 | 16.5 |
| Political Commitment Affects Institutional Cooperation | 4.1 | 9.1 | 28.1 | 43.8 | 14.9 |

Data in Table 3 showed that political will has had a limited influence on regional cooperation outcomes in the Gulf of Guinea. The results showed that 60.3% of respondents rated the effect of political will on policy implementation as low or very low, while only 13.2% perceived it positively. Similarly, 59.5% of respondents rated political commitment to joint patrol compliance as low or very low, compared to only 14.8% who viewed it positively. Political will affecting information-sharing recorded 52.9% negative responses, while institutional cooperation recorded 58.7% negative responses. These findings suggest that weak political commitment among Gulf of Guinea states continues to undermine policy implementation, information-sharing, joint operations and broader institutional cooperation within the region.

**Hypothesis One:**

**$Ho_1$:** Nigeria's policies and leadership do not affect security, economic performance, or institutional cooperation outcomes in the Gulf of Guinea.

**Table 4: Multiple Regression Coefficient Estimates for Hypothesis One**

| Predictor Variable (short label) | Coefficient (β) | t-Statistic | p-Value |
|---|---|---|---|
| MaritPol (Policy Influence) | -0.0722 | -1.156 | 0.250 |
| NigLeadRed (Leadership → Crime Reduction) | 0.0274 | 0.380 | 0.705 |
| MaritPolEcoCoop (Policy → Economic Cooperation) | -0.0350 | -0.569 | 0.571 |
| EffNigLead (Leadership Effectiveness) | 0.0834 | 1.403 | 0.164 |
| NigPolIn (Policy influence on response time) | 0.0144 | 0.234 | 0.815 |

**Decision Rule:** Reject null Hypotheses if $P < 0.05$; otherwise accept.

**Table 5: Model Fit Statistics for Hypothesis One**

| Statistic | Value |
|---|---|
| **R-squared** | 0.031 |
| **Adjusted R-squared** | ≈ 0.000 |
| **F-statistic** | — |
| **Model p-value** | 0.611 |

The multiple regression results presented in Table 4 and 5 show no statistically significant effects of Nigeria's policy and leadership indicators on the composite cooperation outcome at the conventional $\alpha = 0.05$ level. The overall model has very weak explanatory power ($R^2 = 0.031$), indicating that the five predictors collectively explain only 3.1% of the variance in cooperation outcomes. The model is not significant (F test $p = 0.611 > 0.05$), so the set of predictors does not reliably account for differences in cooperation performance. Individually, none of the five independent variables attained statistical significance: MaritPol ($\beta = -0.0722$, $p = 0.250$), NigLeadRed ($\beta = 0.0274$, $p = 0.705$), MaritPolEcoCoop ($\beta = -0.0350$, $p = 0.571$), EffNigLead ($\beta = 0.0834$, $p = 0.164$),


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and NigPolIn (β = 0.0144, p = 0.815). The largest observed coefficient (EffNigLead) is positive but not significant, indicating that perceived leadership effectiveness alone does not translate into measurable improvements in the composite cooperation measure within this sample. Given the non-significant F-statistic (p = 0.611) and the lack of significant individual predictors (all p > 0.05), we fail to reject the null hypothesis ($H_0$). There is insufficient evidence to conclude that Nigeria's policies and leadership, as operationalized here, significantly affect security, economic performance, or institutional cooperation outcomes in the Gulf of Guinea. The findings suggest that the policy and leadership attributes measured in this study are not the primary drivers of regional cooperation outcomes, or that their effects are small relative to other unmeasured influences. Possible alternative explanations include stronger roles for regional political will, external geopolitical dynamics, institutional trust, coordination mechanisms, or contextual operational constraints. Future research should consider these factors and employ longitudinal or multi-level designs to better capture causal mechanisms and contextual moderators.

**Hypothesis Two:**

$H_2$ Levels of maritime domain awareness, legal harmonization and resource allocation significantly predict the effectiveness of Nigeria's maritime cooperation outcomes in the Gulf of Guinea.

**Table 6: Multiple Regression Coefficient Estimates for Hypothesis Two**

| Predictor Variable | Coefficient (β) | t-Statistic | p-Value |
|---|---|---|---|
| Maritime Domain Awareness (MDA) | 0.1043 | 0.984 | 0.329 |
| Legal Harmonization (LH) | 0.0704 | 0.804 | 0.425 |
| Resource Allocation (RA) | 0.0148 | 0.086 | 0.932 |

**Decision Rule:** Reject null Hypotheses if P < 0.05; otherwise accept.

**Table 7: Model Fit Statistics for Hypothesis Two**

| Statistic | Value |
|---|---|
| **R-squared** | 0.031 |
| **Adjusted R-squared** | ≈ 0.000 |
| **Model p-value** | 0.582 |

The results from the multiple regression analysis presented in Table 6 and Table 7 showed no statistical significant difference at (p < 0.05), indicating that the levels of Maritime Domain Awareness (MDA), Legal Harmonization (LH) and Resource Allocation (RA) do not significantly predict Nigeria's maritime cooperation outcomes in the Gulf of Guinea. The regression model demonstrated a very weak explanatory power, with an R-squared value of 0.031, showing that the combined predictors account for only 3.1% of the variation in cooperation outcomes. Furthermore, the model was not statistically significant**,** as reflected by the overall p-value (p = 0.582), indicating that the predictors, taken together, do not reliably explain differences in cooperation effectiveness.

Importantly, none of the individual predictor variables achieved statistical significance. Maritime Domain Awareness (β = 0.1043, p = 0.329) showed no meaningful predictive effect, suggesting that improvements in surveillance capacity, radar coverage, or intelligence fusion centers did not translate into measurable gains in operational cooperation within the sampled data. Likewise, Legal Harmonization (β = 0.0704, p = 0.425) exhibited a non-significant relationship, implying that variations in alignment of


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national maritime laws or enforcement practices did not significantly influence cooperative outcomes. Resource Allocation (β = 0.0148, p = 0.932) demonstrated the weakest effect, with both the coefficient and p-value indicating an almost negligible predictive contribution. Overall, the statistical evidence strongly indicates that the null hypothesis should be accepted**,** confirming that Maritime Domain Awareness, Legal Harmonization and Resource Allocation do not significantly predict the effectiveness of Nigeria's maritime cooperation outcomes at the 95% confidence level. This suggests that cooperation performance in the Gulf of Guinea may be shaped more by external geopolitical dynamics, political will among regional actors, institutional capacity gaps, or coordination challenges not fully captured by these predictors.

**Hypothesis Three**

$H_3$: Political will of neighbouring states does not significantly moderate the relationship between Nigeria's maritime policy influence and regional cooperation outcomes in the Gulf of Guinea.

**Table 8: Moderated Multiple Regression Results for Hypothesis Three**

| Predictor Variable | Coefficient (β) | t-Statistic | p-Value |
|---|---|---|---|
| Constant | 2.4771 | 3.755 | 0.000 |
| Maritime Policy Influence (IV) | 0.0360 | 0.134 | 0.894 |
| Political Will (Moderator) | 0.0556 | 0.216 | 0.830 |
| Interaction Term (IV × Moderator) | –0.0302 | –0.291 | 0.772 |

**Decision Rule:** Reject null Hypotheses if P < 0.05; otherwise accept.

**Table 9: Model Fit Statistics for Hypothesis Three**

| Statistic | Value |
|---|---|
| R-squared | 0.002 |
| Adjusted R-squared | 0.000 (approx.) |
| F-Statistic | 0.037 |
| Model p-Value | 0.964 |

The moderated multiple regression analysis was conducted to examine whether the political will of neighbouring states conditions the relationship between Nigeria's maritime policy influence and regional cooperation outcomes, specifically joint patrol effectiveness. The results presented in Table 8 and Table 9 showed that the interaction term between maritime policy influence and political will is not statistically significant (β = –0.0302, t = –0.291, p = 0.772). This indicates that political will does not exert a moderating effect on the relationship. Furthermore, neither the main effect of maritime policy influence (β = 0.0360, p = 0.894) nor the main effect of political will (β = 0.0556, p = 0.830) achieved statistical significance. The overall model also lacked explanatory strength, with an R-squared value of 0.002, suggesting that the predictors collectively account for only 0.2% of the variation in joint patrol effectiveness. The F-statistic further confirmed the model's non-significance (p = 0.964), indicating that the independent variable, moderator, and interaction term do not jointly provide a meaningful explanation of cooperation outcomes. Based on these results, the null hypothesis is accepted. The evidence demonstrates that the political will of neighbouring states does not significantly moderate the influence of Nigeria's maritime policy on regional cooperation outcomes. In practical terms, the effectiveness of Nigeria's maritime policy does not appear to vary according to levels of political will across neighbouring states, implying that other


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contextual or institutional factors may play a more decisive role in determining cooperation performance within the Gulf of Guinea.

**Discussion of Findings**

The findings of the study revealed that Nigeria's maritime policies and leadership have only moderately influenced security, economic, and institutional cooperation outcomes in the Gulf of Guinea. This finding is consistent with Enemuoh et al. (2022), who observed that maritime security cooperation in West Africa continues to face significant institutional and operational challenges that limit the effectiveness of regional collaboration. Similarly, the findings agree with the United Nations Security Council (2023), which noted that although regional cooperation frameworks exist, their implementation remains uneven across Gulf of Guinea states. The findings also support ENACT-Africa (2025), which identified governance and coordination challenges as major obstacles to effective regional maritime cooperation. However, the findings differ from Monteh (2025), who argued that Nigeria's maritime security policies have substantially enhanced regional maritime governance and cooperation. The disparity may be attributed to differences between policy objectives and stakeholders' practical assessment of implementation outcomes.

The analysis of Hypothesis One revealed that Nigeria's maritime policies and leadership do not significantly predict regional cooperation outcomes. This finding reinforces the argument of Adesanya (2023), who maintained that persistent maritime crimes in the Gulf of Guinea reflect limitations in existing policy frameworks and regional enforcement mechanisms. The result also aligns with Udochukwu et al. (2024), who contended that security governance challenges in Nigeria continue to constrain the effectiveness of policy interventions across regional security structures. Although Monteh (2025) emphasized the importance of Nigeria's maritime security initiatives in strengthening regional stability, the lack of statistical significance in the present study suggests that policy measures alone may be insufficient to generate meaningful regional cooperation without stronger institutional commitment and collective implementation among neighbouring states.

The findings further revealed that maritime domain awareness, legal harmonization, and resource allocation weakly mediate the effectiveness of Nigeria's maritime cooperation outcomes in the Gulf of Guinea. This finding agrees with Okafor-Yarwood et al. (2024), who observed that technological and operational limitations continue to undermine maritime security management across African coastal states. The finding is also consistent with Adesokan (2024), who highlighted deficiencies in legal frameworks and enforcement mechanisms that hinder effective maritime law implementation. Furthermore, ENACT-Africa (2025) emphasized that governance weaknesses and fragmented institutional arrangements continue to affect the effectiveness of regional maritime cooperation initiatives. However, the findings contrast with the position of the United Nations Security Council (2022), which reported improvements in collaborative maritime security measures aimed at combating piracy and armed robbery in the Gulf of Guinea. The divergence may be explained by differences between institutional evaluations and stakeholders' perceptions of practical effectiveness.

Hypothesis Two further demonstrated that maritime domain awareness, legal harmonization, and resource allocation did not significantly predict cooperation outcomes.


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This result supports Okafor-Yarwood et al. (2024), who emphasized that technological innovations and maritime security systems in Africa have yet to achieve their full potential because of operational and institutional constraints. Similarly, Adesokan (2024) noted that inconsistencies in legal procedures and enforcement practices limit the effectiveness of maritime governance efforts. The findings also corroborate ENACT-Africa (2025), which reported that governance deficiencies and inadequate coordination continue to impede the successful implementation of maritime cooperation mechanisms. The absence of significant mediation effects suggests that these factors remain insufficiently developed to strengthen Nigeria's influence on regional cooperation outcomes.

The findings of the study revealed that political will has not significantly promoted regional cooperation outcomes in the Gulf of Guinea. This finding aligns with ENACT-Africa (2025), which identified governance weaknesses, inconsistent commitments, and institutional fragmentation as major barriers to effective regional cooperation. The result also supports the United Nations Security Council (2023), which noted that varying national priorities and implementation capacities among Gulf of Guinea states continue to affect the effectiveness of regional maritime governance frameworks. Similarly, Kicha (2021) argued that regional integration efforts often encounter challenges arising from divergent national interests and weak commitment to collective action. However, the findings differ from Polejack (2021), who emphasized the growing importance of international cooperation and diplomacy in addressing transboundary maritime challenges. The variation may reflect the difference between diplomatic aspirations and the practical realities of policy implementation within the region.

In testing Hypothesis Three, the study found that the political will of neighbouring states did not significantly moderate the relationship between Nigeria's maritime policies and cooperation outcomes. This finding is consistent with Kicha (2021), who maintained that regional integration processes frequently experience limitations due to insufficient political commitment among participating states. The result also supports ENACT-Africa (2025), which reported that governance and coordination challenges continue to weaken collective responses to maritime security and development concerns in the Gulf of Guinea. Furthermore, the findings align with the observations of the United Nations Security Council (2023), which emphasized the need for stronger political commitment and coordinated implementation of regional maritime governance frameworks. The statistical insignificance of the moderating effect therefore suggests that political will across neighbouring states remains inadequate to strengthen the relationship between Nigeria's maritime policies and regional cooperation outcomes.

## Conclusion

This study examined Nigeria’s policy role in promoting maritime security and regional cooperation outcomes in the Gulf of Guinea, with particular emphasis on the influence of maritime policies and leadership, the mediating role of maritime domain awareness, legal harmonization and resource allocation, and the effect of political will in the control of deep-sea mining on regional cooperation outcomes. The findings revealed that although Nigeria occupies a strategic leadership position in the Gulf of Guinea and have invested significantly in maritime security initiatives; its maritime policies and leadership have only achieved moderate success in influencing maritime security, economic cooperation and institutional collaboration within the region. The study found that implementation challenges, weak institutional coordination and divergent interests


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among regional actors continue to limit the effectiveness of Nigeria's maritime governance efforts.

The study further established that maritime domain awareness, legal harmonization and resource allocation remain critical determinants of maritime cooperation outcomes in the Gulf of Guinea. However, these mechanisms were found to be inadequately developed and inconsistently implemented across the region. Weak surveillance integration, fragmented legal frameworks and insufficient financial and operational resources continue to undermine collective maritime security efforts and reduce the effectiveness of regional cooperation initiatives. These limitations constrain the capacity of maritime institutions to effectively prevent and respond to maritime crimes and other transnational threats within the Gulf of Guinea.

## Recommendations

Based on the findings of the study, the following recommendations are made:

1. Nigeria and other Gulf of Guinea states should strengthen regional policy coordination and legal harmonization by developing unified maritime governance frameworks that support joint enforcement operations, information sharing and the prosecution of maritime crimes.
2. Governments and maritime institutions within the region should invest in modern maritime domain awareness technologies, surveillance infrastructure, intelligence-sharing platforms and capacity-building programmes to improve operational effectiveness and regional security cooperation.
3. Gulf of Guinea states should demonstrate stronger political commitment to regional maritime governance through sustained participation in cooperative security arrangements, compliance with regional agreements and increased resource allocation for maritime security operations and institutional development.

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