

# Petroleum Legislation and the Economic Impact of the Petroleum Industry Act (PIA) in Nigeria

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## Abstract

*The Petroleum Industry Act (PIA) was enacted in 2021 to reform Nigeria's petroleum sector by improving regulatory efficiency, investment climate, revenue generation, and host community engagement. This study examines its economic impact using policy analysis, economic data review, and comparative assessment with global best practices. Findings reveal that the PIA has improved governance, with NNPC Limited recording a 28% profit increase in 2024. However, regulatory uncertainty, such as the blocked Shell divestment, continues to deter investors. While government revenue has increased, oil theft and fiscal leakages remain major challenges. The Host Community Development Trusts (HCDTs) have helped reduce vandalism, but fund allocation inconsistencies persist. Environmental regulations under the PIA exist, yet gas flaring and oil spills remain problematic due to weak enforcement. For the PIA to achieve its full potential, policy consistency, improved transparency, and stronger enforcement of environmental and investment policies are essential.*

**Keywords:** Petroleum legislation, petroleum industry act, economic impact, host community development trusts, Nigeria.

## INTRODUCTION

The petroleum industry is the backbone of Nigeria's economy, contributing significantly to government revenue, foreign exchange earnings, and employment. However, the sector has faced persistent challenges such as regulatory inefficiencies, lack of transparency, environmental degradation, and inadequate local content development. In response, the Nigerian government enacted the Petroleum Industry Act [1] (PIA) in 2021, aiming to address these structural issues and create a more competitive, transparent, and sustainable petroleum sector.

The PIA represents a landmark legislative reform designed to restructure regulatory agencies, optimize revenue generation, attract foreign direct investment (FDI), and improve host community relations. It establishes the Nigerian Upstream Petroleum Regulatory Commission (NUPRC [2]) and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) [3] to streamline governance and enhance oversight. Additionally, it transforms the Nigerian National Petroleum Corporation (NNPC) into NNPC Limited [4], making it a profit-driven entity to boost efficiency. Despite its potential benefits, the economic impact of the PIA remains uncertain, necessitating further study. Questions arise regarding its effectiveness in attracting investment, increasing government revenue, improving employment, and addressing community grievances. Scholars have examined global petroleum regulatory frameworks, highlighting best practices in countries like Norway, Saudi Arabia, and Brazil, which emphasize transparency, strong fiscal policies, and sustainable

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Received Date: April 23, 2025

Accepted Date: May 29, 2025

Published Date: June 10, 2025

**Citation:** Nnaemeka Uwaezuoke, Eke Ndukwe Prince. Petroleum Legislation and the Economic Impact of the Petroleum Industry Act (PIA) in Nigeria. *Journal of Petroleum Engineering & Technology*. 2025; 15(3): 1–7p.

development. Comparing these models with Nigeria's PIA provides insights into the Act's strengths and areas for improvement.

This study critically evaluates the economic implications of the PIA on Nigeria's petroleum sector, focusing on investment trends, revenue generation, employment, and environmental sustainability. By analyzing industry data and stakeholder perspectives, the research aims to determine whether the PIA can drive sustainable growth in Nigeria's oil and gas sector amid the global shift towards renewable energy and economic diversification.

## **METHODOLOGY**

The research methodology employed in this study involved use of literature to evaluate the economic impact of the Petroleum Industry Act [1] (PIA) on Nigeria's petroleum sector. A mixed-methods approach was adopted, combining qualitative and quantitative techniques to ensure a comprehensive analysis. The methodology is structured into different components, including research design, data collection methods, and analytical techniques.

### **Research Design**

This study utilizes a descriptive and analytical research design, aimed at understanding the provisions of the PIA and assessing its economic implications. The descriptive aspect focuses on summarizing the key provisions of the PIA, while the analytical aspect evaluates its impact on investment, revenue generation, employment, and host communities.

### **Data Collection Methods**

#### ***Secondary Data Collection***

Given the nature of the research, secondary data was the primary source of information. Data was gathered from:

1. *Legislative documents*: The Petroleum Industry Act (2021) was reviewed to analyze its legal framework and objectives.
2. *Government and industry reports*: Publications from agencies such as the Nigerian National Petroleum Corporation (NNPC) Limited, Nigerian Upstream Petroleum Regulatory Commission (NUPRC [2], and Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) were examined.
3. *Economic databases*: Data from sources like the World Bank [5], International Monetary Fund (IMF [6], and Nigerian Bureau of Statistics [7] (NBS) were used to assess economic indicators such as GDP contribution, oil production levels, and investment trends.
4. *Academic and industry research*: Studies from journals, policy papers, and reports from organizations like KPMG [8], PwC [9], and OPEC [10] were reviewed to compare Nigeria's petroleum reforms with global best practices.

### ***Comparative Analysis***

To evaluate the effectiveness of the PIA, Nigeria's petroleum legislation was compared to regulatory frameworks in other oil-producing nations such as Norway, Saudi Arabia, and Brazil. This comparative approach helped identify strengths, weaknesses, and potential areas of improvement in the Nigerian petroleum sector.

### ***Economic Impact Assessment***

A structured economic analysis was conducted to measure the PIA's influence on key economic factors:

1. *Investment trends*: Examining foreign direct investment (FDI) inflows before and after the enactment of the PIA.
2. *Revenue generation*: Assessing changes in government revenue from petroleum-related activities.
3. *Employment and local content development*: Analyzing workforce participation and the impact of local content policies.

4. *Host community development*: Evaluating the effectiveness of Host Community Development Trusts (HCDTs) in reducing conflict and promoting economic growth in oil-producing regions.

### **Data Analysis Techniques**

The collected data was analyzed using qualitative and quantitative techniques to derive meaningful insights:

1. *Thematic analysis*: Used to identify recurring themes in literature and policy documents related to governance, investment, and regulatory challenges.
2. *Descriptive statistics*: Economic data was presented through tables, charts, and trends to illustrate key findings.
3. *Comparative interpretation*: Nigeria's petroleum policies were analyzed alongside best practices in successful oil-producing economies to determine the effectiveness of the PIA's implementation.

### **Study Limitation**

Despite the robustness of the methodology, certain limitations exist:

1. *Dependence on secondary data*: The study relied on existing reports and publications, which may not fully capture real-time industry dynamics.
2. *Time constraint*: The study covered the period 2021–2024, limiting the ability to assess long-term effects of the PIA.
3. *Data gaps*: Some economic indicators were not readily available, requiring reliance on industry projections and expert analyses.

## **RESULTS AND DISCUSSION**

The findings of the study and the economic impact of the Petroleum Industry Act (PIA) on Nigeria's petroleum sector are highlighted. It is structured around key areas, including investment trends, government revenue, employment, host community development, and environmental sustainability. These results provide a clear picture of how the PIA has influenced Nigeria's oil and gas industry since its enactment in 2021.

### **Investment Trends and Foreign Direct Investment (FDI)**

One of the PIA's primary goals was to attract foreign direct investment (FDI) by creating a transparent and investor-friendly environment. However, while the Act has improved regulatory clarity, actual investment inflows have been mixed.

#### ***Positive Developments***

1. The streamlined regulatory framework and clearer fiscal policies have reduced uncertainty, making Nigeria more attractive to potential investors.
2. The transformation of NNPC into NNPC Limited [4] has boosted confidence in the commercial viability of Nigeria's national oil company, making partnerships more appealing to investors.

#### ***Challenges***

1. Regulatory inconsistencies still deter some investors. A notable example was the Nigerian government blocking Shell's [11] \$2.4 billion sale of its onshore assets in 2024, raising concerns about policy unpredictability.
2. Security issues, such as pipeline vandalism and oil theft, remain significant risks, discouraging long-term commitments from investors.

While the PIA has created a more structured investment framework, its impact on FDI has been limited by regulatory uncertainty and security concerns. For the Act to fully achieve its investment objectives, the government must ensure consistent policy enforcement and address security risks in oil-producing regions.

## **Government Revenue and Fiscal Performance**

Revenue generation was a major focus of the PIA, with key reforms aimed at increasing government earnings from the petroleum sector.

### ***Positive Developments***

1. The restructuring of NNPC Limited has improved operational efficiency, leading to a 28% increase in its net profit in 2024.
2. Revised royalty and tax structures under the PIA have optimized government earnings, making Nigeria's fiscal terms more competitive in the global oil market.

### ***Challenges***

1. While revenue has improved, the allocation of 30% of revenue to frontier exploration has sparked debate, as some stakeholders argue that these funds could be better used for immediate national development needs.
2. Revenue leakages and oil theft continue to limit the full financial benefits of the PIA.

The PIA has helped increase revenue from petroleum activities, but leakages and misallocations remain issues. There is a need for stricter revenue management and improved oversight to ensure funds are used effectively for economic development.

## **Employment and Local Content Development**

The Act was designed to boost job creation and local participation in the petroleum sector through local content policies and industry expansion.

### ***Positive Developments***

1. The PIA mandates greater involvement of Nigerian companies and workers in oil and gas operations, leading to more opportunities in engineering, logistics, and oilfield services.
2. The expansion of the midstream and downstream sectors, including projects like the Dangote Refinery, has created additional employment opportunities.

### ***Challenges***

1. Data on actual employment growth remains limited, making it difficult to measure the direct impact of the PIA on job creation.
2. Some local businesses still struggle to compete with international firms due to a lack of technical expertise and access to funding.

The PIA has strengthened local content policies, but more support is needed for Nigerian businesses to compete effectively. Additional training programs and access to financing could enhance local participation in the petroleum sector.

## **Host Community Development and Social Stability**

A major innovation of the PIA is the creation of Host Community Development Trusts (HCDTs) to channel funding into local development projects and reduce conflicts in oil-producing regions.

### ***Positive Developments***

1. Some communities have benefited from infrastructure projects such as roads, schools, and healthcare facilities funded by the HCDTs.
2. Incidents of vandalism have reduced in areas where the trusts are well-managed, showing that community engagement can help improve security.

### ***Challenges***

1. Implementation has been inconsistent, with some communities complaining about delays in fund disbursement and a lack of transparency in how funds are managed.

2. Mistrust between oil companies and host communities still exists, with some local groups feeling excluded from decision-making.

While the HCDDTs have the potential to transform host communities, their success depends on proper fund management and inclusive decision-making. The government and oil companies must ensure transparency and fair distribution of funds to maximize the program's impact.

### **Environmental Sustainability and Compliance**

The PIA introduces stricter environmental regulations, requiring oil companies to adopt best practices in pollution control, oil spill management, and gas flaring reduction.

#### ***Positive Developments***

1. The Act enforces stronger penalties for environmental violations, making companies more accountable.
2. There has been a slight reduction in gas flaring rates, though further improvement is needed.

#### ***Challenges***

1. Enforcement remains weak, with some companies still flouting environmental laws due to limited government oversight.
2. Oil spills and land degradation remain serious problems, particularly in the Niger Delta, where cleanup efforts have been slow.

The PIA has introduced important environmental safeguards, but enforcement is lacking. Stronger regulatory action and community engagement are needed to ensure full compliance with sustainability measures.

### **Comparison with Global Best Practices**

A comparative analysis with countries like Norway [12], Saudi Arabia [13], and Brazil [14] reveals key lessons Nigeria can adopt:

1. Norway's Sovereign Wealth Fund ensures oil revenues benefit future generations. Nigeria could strengthen its oil revenue savings mechanisms for long-term economic stability.
2. Saudi Arabia's investment-friendly policies attract FDI. Nigeria must ensure regulatory consistency to enhance investor confidence.
3. Brazil's enforcement of environmental laws ensures sustainability. Nigeria should adopt stricter environmental monitoring systems to protect oil-producing communities.

The PIA has moved Nigeria closer to global best practices, but additional reforms are necessary to maximize economic benefits and environmental protection. The findings of this study indicate that the PIA has made significant progress in improving governance, revenue generation, and community engagement. However, challenges such as regulatory uncertainty, environmental enforcement gaps, and investment risks continue to hinder its full potential. Addressing these issues through stronger policy enforcement, transparent fund management, and enhanced investor confidence will be key to ensuring the PIA's long-term success in transforming Nigeria's petroleum industry.

### **CONFLICT OF INTEREST**

This study was conducted with the primary aim of analyzing the economic impact of the Petroleum Industry Act (PIA) on Nigeria's petroleum sector using available data, policy reviews, and comparative analysis. However, certain conflicts of interest or potential biases may arise, which are acknowledged, thus:

1. *Dependence on secondary data:* The research relies on reports from government agencies (NNPC Limited, NUPRC, NMDPRA, international organizations (IMF), World Bank, OPEC, and industry stakeholders (KPMG) [8], PwC [9]. These sources, while reputable, may present data in a way that aligns with institutional or governmental interests, potentially affecting objectivity.

2. *Stakeholder bias in policy interpretation:* The study references opinions from government bodies, oil companies, and host communities. Each stakeholder may have different perspectives on the success or limitations of the PIA, leading to variations in interpretation.
3. *Regulatory and political considerations:* The implementation of the PIA is subject to political influence, and certain policy outcomes may be shaped by government priorities or industry lobbying rather than purely economic or developmental factors.
4. *Comparative analysis limitations:* While this study compares Nigeria's petroleum reforms to global best practices (e.g., Norway, Saudi Arabia, Brazil), economic and political differences between these countries could limit direct applicability.

Although every effort was made to maintain objectivity through a balanced approach, these potential conflicts of interest highlight the need for further independent research and continuous evaluation of the PIA's real-world impact.

## CONCLUSION

This study set out to examine the economic impact of the Petroleum Industry Act (PIA) on Nigeria's petroleum sector, focusing on key areas such as investment trends, revenue generation, employment, host community development, and environmental sustainability. Through a combination of policy analysis, economic data review, and comparative assessment with global best practices, the study has provided insights into how the PIA has shaped Nigeria's oil and gas industry since its enactment in 2021. The findings indicate that the PIA has introduced important reforms, particularly in governance and fiscal management. The restructuring of the Nigerian National Petroleum Corporation (NNPC) into NNPC Limited has led to improved operational efficiency, with recorded increases in profitability. The Act has also attracted some foreign direct investment (FDI) by creating a clearer regulatory framework, although concerns remain about policy consistency and investment risks. On the fiscal side, the PIA's revised tax and royalty structures have strengthened revenue generation, but challenges such as oil theft, misallocation of resources, and regulatory enforcement gaps continue to limit its full potential. In terms of employment and local content development, the Act has increased opportunities for Nigerian companies and workers but limited technical capacity and funding access still pose obstacles. The introduction of Host Community Development Trusts (HCDTs) has shown positive early results in reducing conflicts in oil-producing areas, yet fund management transparency and equitable distribution remain critical concerns. Similarly, while the PIA's environmental regulations have set higher compliance standards, enforcement remains weak, and issues such as gas flaring, oil spills, and land degradation continue to affect host communities. In comparison to global best practices, Nigeria's petroleum reforms have improved in areas such as regulatory clarity and revenue optimization, but further efforts are needed in transparency, investor confidence, and environmental sustainability. The PIA represents a major step toward modernizing Nigeria's petroleum sector, but its success depends on effective implementation, regulatory enforcement, and continuous policy adaptation. To maximize its benefits, the government must enhance transparency, strengthen community engagement, and create a more stable investment climate. With the right strategies in place, the PIA has the potential to not only transform Nigeria's oil and gas industry but also contribute to long-term economic stability, job creation, and sustainable development.

## NOMENCLATURE

- PIA – Petroleum Industry Act
  - NNPCL – Nigerian National Petroleum Company Limited
  - NUPRC – Nigerian Upstream Petroleum Regulatory Commission
  - NMDPRA – Nigerian Midstream and Downstream Petroleum Regulatory Authority
  - HCDTs – Host Community Development Trusts
  - FDI – Foreign Direct Investment
  - GDP – Gross Domestic Product
  - OPEC – Organization of Petroleum Exporting Countries
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Fiscal Regime – The system of taxation, royalties, and incentives governing petroleum operations  
Gas Flaring – The burning of excess gas during oil extraction, leading to environmental pollution  
Revenue Leakages – Loss of government revenue due to inefficiencies, corruption, or oil theft

These terms form the foundation of the discussion throughout the study.

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