

Effect of Local Content Policy Implementation on Employment Outcomes in the Oil & Gas Supply Chain in Bayelsa State, Nigeria

¹Kenneth Ukeagu,

²Bawa Basil &

³Abimiku John

^{1,2&3}*Department of Public
Administration, Faculty of
Administration,
Nasarawa State University, Keffi.
Nasarawa State, Nigeria*

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Corresponding Author:

Kenneth Ukeagu

Abstract

The implementation of Nigeria's Local Content Policy in the oil and gas sector was designed to enhance indigenous participation, strengthen local capacity, and create sustainable employment opportunities across the industry's supply chain. This study examines the effect of Local Content Policy implementation on employment outcomes within the oil and gas supply chain, focusing on job creation, skills development, and career progression for Nigerian workers. Guided by the Policy Implementation Theory and Human Capital Development Theory, the research adopted a mixed-methods approach, combining quantitative survey data from 397 respondents with qualitative insights from 18 purposively selected stakeholders, including industry regulators, oil and gas service providers, and community representatives. The findings reveal that the Local Content Policy has significantly increased employment opportunities for Nigerians, promoted technical skills transfer, and fostered entrepreneurial participation in the supply chain. However, challenges such as skill gaps, limited access to capital for indigenous contractors, weak monitoring mechanisms, and occasional policy implementation inconsistencies hinder optimal outcomes. The study recommends targeted capacity-building initiatives, improved funding access for local firms, and strengthened regulatory oversight to ensure full realisation of the policy's employment objectives. Effective implementation of these measures could further boost local workforce participation and advance sustainable economic development in Nigeria's oil and gas sector.

Background to the Study

In many resource-rich nations, the oil and gas sector represent a powerful engine for economic transformation. However, the “resource curse” remains a persistent risk when local communities fail to benefit from extraction activities (Talla, 2024). To counteract this, a growing number of governments have adopted local content policies, aiming to enhance local participation in employment, procurement, and capacity development across the value chain (Talla, 2024).

Evidence from various global contexts underscores the promise of such policies when well-designed and implemented in generating meaningful benefits. Total Energies, for instance, has demonstrated how prioritising local labour and training in African projects contributes to local employment, sustainable capacity building, and long-term socio-economic development (African Energy Chamber, 2024). Similarly, in Ghana, local content policies have led to the creation of thousands of direct jobs and enhanced skills development through training programmes and SME support structures (The Extractor Magazine, 2024).

Yet, the effectiveness of local content policies depends critically on institutional strength and policy fidelity. International comparisons reveal how countries such as Norway and Botswana leveraged robust policy frameworks to foster local capability and transform resource wealth, whereas countries with weaker governance structures like Nigeria often fall short on expected outcomes (O&G review, 2018). Against this global backdrop, Nigeria enacted the Nigerian Oil and Gas Industry Content Development (NOGICD) Act in 2010, formalising efforts to increase the participation of indigenous manpower and suppliers in the oil and gas industry. In the Niger Delta, recent empirical evidence confirms that local content policies have significantly influenced local workforce employment generation (Elensi et al., 2024).

Focusing even more narrowly on Bayelsa State, the local seat of Nigeria's oil industry, the region remains economically underdeveloped despite vast natural endowments, including being home to the Oloibiri Oilfield and sizable gas reserves (Bayelsa State, 2025). A 2024 study examined vocational and technical education in Bayelsa in relation to supporting local content policy, identifying substantial challenges such as inadequate training, limited infrastructure, and poor policy enforcement (2024). Taken together, these observations suggest that while local content policies hold promise for both increasing indigenous employment and building workforce skills, their success in Bayelsa hinges on targeted institutional support and implementation capacity. In global settings, prioritising local labour has driven job creation (Total Energies case), but effectiveness is tied to institutional frameworks and policy design. In Bayelsa, despite substantial resource wealth, institutional constraints may undermine job generation even when the policy framework exists (Elensi et al., 2024; Bayelsa State, 2025). The study examine how indigenous manpower utilisation under local content mandates affects direct employment in Bayelsa has strong theoretical and empirical grounding.

Across Africa, training and local capacity building are central pillars of successful local content strategies (The Extractor Magazine, 2024; African Energy Chamber, 2024). However, in Bayelsa, research indicates gaps in the provision of such training and infrastructure, limiting human capital development (2024). The second study objective is to assess the impact of training initiatives on skills and employability aligns with both international practice and Bayelsa's context.

Thus, the general objective of this study is to assess the effect of Local Content Policy Implementation on Employment Outcomes in the Oil & Gas Supply Chain in Bayelsa State, Nigeria. Specifically, the study aims to:

- i. Examine the effect of indigenous manpower utilisation, as mandated by Local Content implementation, on the level of direct employment generation in the oil and gas supply chain in Bayelsa State, Nigeria.
- ii. Assess the impact of in-country training and capacity-building initiatives under Local Content implementation on the skill development and employability of the workforce in the oil and gas supply chain in Bayelsa State, Nigeria.

Literature Review

Conceptual Framework

The conceptual framework for this study is anchored on the premise that the implementation of Nigeria's Local Content Policy directly influences employment outcomes in the oil and gas supply chain through two primary mechanisms indigenous manpower utilisation and training and capacity-building initiatives. Drawing from human capital development theory, the framework posits that increased engagement of local labour fosters direct job creation, while targeted training programmes enhance workforce skills and employability, thereby improving overall labour market outcomes. In the context of Bayelsa State, where oil and gas activities dominate the economy yet unemployment and skill gaps persist, this framework serves to illustrate the causal pathways and linkages between policy implementation and measurable employment impacts.

Employment

Employment refers to a formal or informal arrangement in which an individual engages in productive work in exchange for compensation, typically in the form of wages, salaries, or other benefits. It serves as a crucial driver of economic growth, social stability, and individual well-being, providing financial security, enhancing social inclusion, and fostering skill development. According to the International Labour Organization (ILO, 2023), employment encompasses all activities undertaken by persons of working age to produce goods or provide services for pay or profit, whether in formal or informal sectors. In contemporary labour markets, employment is shaped by factors such as technological innovation, globalisation, demographic shifts, and policy frameworks that influence job creation and labour demand (Almeida et al., 2021). The quality of employment characterised by decent working conditions, fair wages, and job security is increasingly emphasised in development discourse as a means to achieve Sustainable Development

Goal 8, which promotes inclusive and sustainable economic growth, full and productive employment, and decent work for all. In developing economies such as Nigeria, employment challenges persist, including high youth unemployment, underemployment, skills mismatch, and the dominance of informal work arrangements (Okolie & Nwosu, 2020).

Employment refers to the state or condition of working for pay, typically under a contract that defines the relationship between the employer and the employee. According to the UK's Labour Force Survey, a person is considered employed if they are aged 16 or over and have done at least one hour of paid work in the reference week or are temporarily away from their job but remain formally attached to it, such as those on holiday or on medical leave. The International Labour Organisation (ILO) similarly defines employment as including those engaged in paid or self-employment, whether working or temporarily absent, and emphasises the importance of capturing all forms of productive activity even minimal ones to accurately reflect economic participation.

This inclusive definition ensures clarity in distinguishing between employment, unemployment, and economic inactivity, which is vital for reliable labour market analysis. In the specific context of the oil and gas supply chain such as in Bayelsa State this definition ensures that direct employment measures encompass all individuals engaged in paid work, including contractors, self-employed service providers, and formally employed labourers. Consequently, when assessing employment outcomes under the Local Content Policy, the study will capture the full spectrum of active contributors to the sector, reflecting both formal employment relationships and informal or transitional labour arrangements in a resource-rich but structurally complex environment.

Manpower

Manpower refers to the aggregate human resource base available and capable of performing various tasks required for the achievement of organisational, sectoral, or national objectives. It encompasses both the quantity and quality of labour, including the skills, competencies, knowledge, and experience of individuals that can be mobilised for productive purposes. As highlighted by Kanyane and Mofolo (2022), manpower is not only about the number of workers available but also about their capacity to meet the evolving demands of industries and economies. In workforce planning, manpower analysis involves assessing present and future human resource needs, identifying skill gaps, and implementing strategies to ensure an adequate supply of qualified personnel. Effective utilisation of manpower is critical for organisational productivity, economic growth, and national competitiveness (Ude & Agbo, 2021). In the context of public administration, manpower development is often pursued through training, capacity-building, and continuous professional education to improve performance and service delivery. However, challenges such as brain drain, inadequate investment in education and vocational training, and mismatched labour supply and demand continue to undermine optimal manpower utilisation in many developing countries.

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Manpower refers to the total supply of individuals available and suitably qualified to carry out specific tasks or roles within an economic or organisational context. Unlike the concept of labour which emphasises the effort or productive activity performed manpower focuses on quantity and readiness of workforce, encompassing both existing employees and potential candidates for future roles (DITRC, 2024). It is a critical strategic resource, especially in sectors like oil and gas, where the availability of skilled personnel directly influences project success, operational continuity, and policy impact. Manpower includes not only headcount but also the diversity of skills, qualifications, and deployment readiness necessary for effective workforce planning and management (MBA Skool Team, 2023). The term is frequently employed in planning contexts: organisations use it to forecast staffing needs, ensure that the “right number of people with the right skills” are available at the “right time and place,” and to manage gaps caused by turnover or changing project requirements (Engineering Interview Questions, 2024). In the context of this study examining the effect of local content implementation on employment outcomes in Bayelsa State indigenous manpower utilisation becomes meaningful: it denotes the engagement and deployment of local human resources in the oil and gas supply chain, which is central both to fulfilling policy mandates and to advancing local capacity and employment generation.

Capacity-Building

Capacity-building refers to the process of developing and strengthening the abilities, skills, resources, and institutional frameworks that individuals, organisations, and

communities require to perform effectively, achieve objectives, and sustain development outcomes. It is a multidimensional concept encompassing human resource development, organisational strengthening, and the creation of enabling environments for sustainable growth. According to United Nations Development Programme (UNDP, 2021), capacity-building involves enhancing competencies at three interrelated levels: individual, organisational, and societal. At the individual level, it includes training, mentoring, and professional development to improve skills and knowledge. At the organisational level, it entails improving processes, governance structures, and resource management to achieve efficiency and effectiveness. At the societal level, it focuses on policy formulation, institutional reforms, and community empowerment to foster an environment where development initiatives can thrive. Recent studies indicate that capacity-building is vital for promoting innovation, adaptability, and resilience in an increasingly complex socio-economic context (Akinwale & Adepoju, 2022). However, challenges such as inadequate funding, lack of political will, and limited stakeholder engagement often hinder its success. Therefore, effective capacity-building requires participatory approaches, sustained investment, and strategic partnerships to ensure that skills and systems developed are relevant, context-specific, and sustainable over time.

Employability

Employability refers to the combination of skills, knowledge, personal attributes, and competencies that enable individuals to secure and maintain employment, adapt to changing job demands, and progress in their careers. It is not limited to the ability to get a job but also includes the capacity to remain employable throughout one's working life. According to Jackson and Tomlinson (2020), employability encompasses technical skills, transferable soft skills such as communication, problem-solving, and teamwork, as well as attitudes such as adaptability, resilience, and a willingness to learn. In the context of a rapidly evolving labour market influenced by globalisation, technological change, and economic uncertainties, employability is increasingly viewed as a dynamic and lifelong process rather than a static achievement (Clarke, 2018). Higher education institutions and vocational training providers play a critical role in enhancing graduates' employability by embedding work-integrated learning, career services, and industry partnerships into curricula. Furthermore, employability is shaped by external factors such as labour market conditions, economic policy, and industry demand, meaning that it is both an individual responsibility and a societal concern (Bates & Hayes, 2020). Recent evidence highlights that in developing economies, employability initiatives must go beyond skill acquisition to address systemic barriers such as limited job opportunities, skills mismatch, and inadequate career guidance. Thus, employability is best understood as a holistic construct that links individual capability with labour market realities, ensuring that people can not only find work but also sustain meaningful and productive careers.

The Nigerian Local Content Policy

The Nigerian Local Content Policy was established to promote the development of local content in the oil and gas industry through the Nigerian Oil and Gas Industry Content Development (NOGICD) Act, enacted on April 22, 2010. This policy mandates the use of

Nigerian human resources, materials, and services in oil and gas operations, aiming to maximize local participation and economic benefits

- i. Enhance Local Participation: The policy seeks to increase the involvement of Nigerian companies and citizens in the oil and gas sector, thereby fostering local expertise and capacity building.
- ii. Economic Diversification: By promoting local content, the policy aims to reduce dependency on imports and stimulate the growth of indigenous industries, contributing to Nigeria's overall economic diversification.
- iii. Job Creation: The initiative is designed to create jobs and improve livelihoods by encouraging local employment and skills development in various sectors.

In 2021, the Nigerian Communications Commission (NCC) issued guidelines requiring telecommunications operators to produce Subscriber Identity Modules (SIM) locally, reflecting the broader application of local content policies across different sectors, including telecommunications. Additionally, the "Renewed Hope Nigeria First" policy was approved to prioritize local content and strengthen domestic economic activities, indicating a government commitment to enhancing local participation in all business activities.

The Nigerian Content Development and Monitoring Board (NCDMB) is responsible for overseeing the implementation of the local content policy. It aims to ensure compliance with the NOGICD Act and promote the development of local capacities through various initiatives and partnerships. The Nigerian Local Content Policy represents a strategic effort to empower local industries, enhance economic growth, and ensure that the benefits of Nigeria's natural resources are maximized for its citizens. By fostering local participation and reducing reliance on foreign entities, the policy aims to create a more sustainable and self-reliant economy.

Empirical Review

Oyinlola (2015) assess the influence of local content policy on employment generation in the Niger Delta region. The study adopted a survey research design, and data were analysed using simple regression at a 0.05 level of significance. The population consisted of residents within the Niger Delta region, justified by their direct exposure to the impacts of the oil and gas industry. The sample size was not explicitly stated. The key finding was that the local content policy has significantly influenced the employment of the local workforce in the Niger Delta region. The study recommended that the government should ensure the appropriate implementation of the local content policy to ensure that employment quotas are strictly followed in the oil and gas sector. Furthermore, the Nigerian Content Development and Monitoring Board (NCDMB) should ensure that oil companies operating in the Niger Delta region strictly adhere to the policy of contract awards to Nigerian independent operators, with a view to reducing unemployment and enhancing socio-economic development in the region. This review is relevant as it directly assesses the impact of the local content policy on employment within the Niger Delta, a key oil-producing region.

Okwelum (2022), examined the perspectives on manpower development in the oil and gas sector, noting the complaints from both oil companies and communities regarding the availability of suitably qualified manpower. The study adopted a doctrinal method, reviewing existing literature and policies. The population was the general workforce and communities affected by the oil and gas industry in Nigeria. A specific sample size was not applicable due to the nature of the study. The findings indicated that while the state aims to develop human resources, multinational oil companies lack a clear commitment to this, except where it maximises profit. The paper called for more public-private initiatives and fuller implementation of local content doctrines, including the involvement of local content vehicles. This review is relevant as it highlights the challenges in manpower development and the need for stronger commitment to local content implementation.

Authors (2025) investigated the comparative employment generation capacity and working conditions offered by multinational corporations (MNCs) and domestic firms (DMFs) in the oil and gas sector of Rivers State between 2018 and 2023. A survey research design was employed, targeting a population of 120,000 employees across selected MNCs and DMFs. Using Taro Yamane's (1973) formula, a sample of 400 respondents was drawn through simple random sampling. Data was collected via structured questionnaires and analysed using both descriptive and inferential statistics. The findings revealed that MNCs consistently offer more employment opportunities than DMFs, supported by formalised recruitment systems and larger workforce capacities. Furthermore, MNCs tend to provide higher salaries, better job security, and more comprehensive employee benefits. In contrast, domestic firms rely more on short-term and contract-based employment with limited benefits. The study recommends targeted government support for domestic firms through incentives, skills development, and labour policy reforms aimed at improving job quality and bridging the employment gap in the sector. This review is relevant because it provides a comparative analysis of employment practices, highlighting the areas where indigenous firms need support to enhance employment generation.

NCDMB (2019) analysed human capital development trends in the Nigerian oil and gas industry, utilising data captured through the Electronic Biometrics System, which tracked expatriate deployment. The study's population consisted of all expatriate staff operating in the Nigerian oil and gas industry, with data collected on 4,787 expatriates as of June 2019. The analysis indicated that job creation potential is higher at levels 2, 3, and 4 of the employment matrices (EPC contractors and service companies) than level 1 (Operators), who demand services for exploration, field development, and production activities. The report recommended developing an integrated Human Capital Development (HCD) programme to develop indigenous human capital to occupy managerial, technical, and non-technical positions in the industry. It also suggested that the Oil and Gas Trainers Association (OGTAN) be mandated to develop standards for training centres in the oil and gas industry. This review is relevant as it provides insights into the trends of expatriate employment and the need for targeted human capital development programmes to enhance indigenous participation.

Oyinlola, (2015) assess the influence of local content policy on employment generation in the Niger Delta region of Nigeria. The study adopted a survey research design and analysed data using simple regression at a 0.05 level of significance. The population consisted of residents within the Niger Delta region, justified by their direct exposure to the impacts of the oil and gas industry. While the sample size wasn't explicitly stated, the key finding was that the local content policy has significantly influenced the employment of the local workforce in the Niger Delta region. The study recommended that the government should ensure the appropriate implementation of the local content policy to ensure that employment quotas are strictly followed in the oil and gas sector. Furthermore, the Nigerian Content Development and Monitoring Board (NCDMB) should ensure that oil companies operating in the Niger Delta region strictly adhere to the policy of contract awards to Nigerian independent operators, with a view to reducing unemployment and enhancing socio-economic development in the region. This review is relevant as it directly assesses the impact of the local content policy on employment within the Niger Delta, a key oil-producing region.

Udo, Udoma & Belo-Osagie (2021) prescribes minimum standards, facilities, and technology for the training and development of personnel in the industry, with the objective of increasing local capacity and levels of employability for Nigerians in the Industry. The Regulations apply to service providers and to all operators including NNPC Limited, its subsidiaries, joint venture partners, and other Nigerian and foreign companies operating under any arrangements in the industry. This review is relevant as it highlights the need for stronger commitment to local content implementation.

NCDMB (2023) this study's core mandate is to create in-country value through viable and robust strategic development of capacity and capabilities. Ensuring the deliberate utilization and promotion of Nigerian human, material resources and services to further the attainment of sustainable development in the Nigerian oil and gas Industry, as well as the creation of sectoral linkages to boost industry contributions to the growth of Nigeria's National Gross Domestic Product. The key objectives of the directorate cover the following amongst others: Create and drive viable sustainable development initiatives and globally competitive capacity/capability in-country; Enhance the employability of Nigerians and maximize effective and sustainable utilization of Nigerian human capital in the oil and gas industry and linkage sector; Drive job creation and support the development and growth of technical and non-technical skills, soft/essential skills, vocational and entrepreneurship skills and STEM education. This review is relevant as it provides insights into the trends of expatriate employment and the need for targeted human capital development programmes to enhance indigenous participation.

Sam Abbott Energy Services Ltd. (2024) recognizes the importance of developing local capacity and has mandated training requirements for companies operating in the industry. The benefits of workforce training include: Improved safety, Increased productivity, Enhanced quality, Reduced costs, Improved morale. Training can help prepare young employees for more difficult responsibilities in the future, which can help

avoid talent gaps when more experienced employees retire. Training local talent can help reduce dependence on foreign expertise, which can potentially lower operational costs. This review is relevant as it provides a comparative analysis of employment practices, highlighting the areas where indigenous firms need support to enhance employment generation.

Effect of Local Content Policy Implementation on Employment Outcomes in the Oil & Gas Supply Chain

Local Content Policy (LCP) in the oil and gas sector refers to deliberate measures designed to promote the participation of local businesses, labour, and materials in the industry's value chain, with the aim of maximising socio-economic benefits for the host country. In the Nigerian context, the Nigerian Oil and Gas Industry Content Development (NOGICD) Act of 2010 represents a significant policy framework intended to stimulate domestic employment, build local capacity, and reduce dependence on foreign labour and inputs in the oil and gas supply chain. According to Anigbogu et al. (2021), the implementation of LCP has the potential to significantly enhance employment outcomes by mandating oil and gas companies to prioritise the recruitment, training, and retention of indigenous workers across all stages of production, procurement, and service delivery. The employment effects of such policies are often measured in terms of job creation, skill enhancement, wage growth, and long-term employability of local workers.

In the oil and gas supply chain, which spans upstream exploration to downstream distribution, LCP implementation influences employment outcomes by creating direct jobs in core extraction and processing activities, as well as indirect jobs in supporting industries such as engineering, logistics, fabrication, and maintenance (Onifade & Ajayi, 2020). Furthermore, local content provisions encourage human capital development through mandatory training programmes, technology transfer initiatives, and apprenticeship schemes. This not only improves the technical and managerial competencies of the local workforce but also enhances their competitiveness in both domestic and international labour markets (Ezeani & Nwokolo, 2022). However, the extent to which LCP translates into sustainable employment outcomes depends on factors such as enforcement mechanisms, the absorptive capacity of local firms, and the alignment between industry skill requirements and the competencies of the available labour force.

Critically, while evidence suggests that LCP implementation has increased indigenous employment in Nigeria's oil and gas sector, challenges persist in ensuring that these jobs are high-quality, long-term, and equitably distributed (Obi et al., 2023). Issues such as skills gaps, infrastructural deficits, and weak monitoring have in some cases limited the depth of local workforce integration, leading to situations where foreign expertise is still dominant in specialised technical roles. Therefore, the effect of LCP implementation on employment outcomes should be viewed as a function of both policy design and the broader socio-economic and institutional environment. When effectively implemented, LCP can serve as a catalyst for employment generation, poverty reduction, and industrial

diversification, thereby contributing to the broader goals of sustainable development in resource-rich economies.

Theoretical Framework

Human Capital Theory – Becker (1964)

The Human Capital Theory, propounded by Gary Becker in 1964, posits that investments in people through education, training, and skills development enhance their productivity and economic value. According to the theory, much like physical capital, human capital can be accumulated through deliberate and sustained investments in knowledge and abilities, resulting in higher returns in terms of productivity, income, and employability. In essence, it frames skills, experience, and knowledge as economic assets that yield benefits to both individuals and society.

In the context of this study, the Human Capital Theory is highly relevant because one of the core objectives is to assess the impact of training and capacity-building initiatives under the Local Content Policy on skill development and employability in Bayelsa State's oil and gas supply chain. The theory provides a conceptual foundation for understanding how such investments in human capital translate into enhanced labour market outcomes. It also offers a framework for analysing the relationship between the Nigerian Oil and Gas Industry Content Development (NOGICD) Act's training provisions and the potential improvements in local workforce capacity. The theory operates on several assumptions. Firstly, it assumes that education and training directly improve worker productivity. Secondly, it presumes that individuals and societies act rationally, weighing the costs of investment in training against the expected future benefits. Thirdly, it assumes that the labour market rewards higher skills with better job opportunities and wages.

Despite its utility, the Human Capital Theory faces criticism. One major criticism is that it tends to overlook structural and institutional barriers such as discriminatory hiring practices, policy implementation weaknesses, or limited job availability which can prevent skilled workers from fully realising their potential. Critics also argue that it assumes a linear relationship between education/training and productivity, which may not hold true in contexts where the economy cannot absorb skilled labour. In regions like Bayelsa, the presence of skill mismatches and underemployment can weaken the direct link between training and employability.

Resource-Based View (RBV) – Wernerfelt (1984)

The Resource-Based View (RBV), advanced by Birger Wernerfelt in 1984, conceptualises organisations as collections of resources and capabilities that, when effectively managed, can provide sustainable competitive advantage. The RBV holds that valuable, rare, inimitable, and non-substitutable (VRIN) resources such as skilled personnel, technological know-how, and local market knowledge are critical for long-term organisational success. This framework focuses on how unique internal resources, rather than just market conditions, determine performance outcomes.

This theory is relevant to the study because the Local Content Policy in Nigeria emphasises the use of indigenous manpower and locally developed capabilities as strategic resources in the oil and gas industry. By framing local human resources as a source of competitive advantage, the RBV aligns with the objective of examining how indigenous manpower utilisation affects direct employment generation in Bayelsa State. It highlights that effective use of local skills and expertise not only benefits the industry but also strengthens local economic resilience.

The RBV rests on key assumptions. Firstly, it assumes that resources and capabilities are heterogeneously distributed among organisations. Secondly, it posits that certain resources cannot be easily transferred or replicated, thus creating sustained advantages. Thirdly, it assumes that firms will seek to build and leverage resources that enhance efficiency, productivity, and market position. However, the RBV has faced criticism. Critics argue that it can be too inward-looking, neglecting external environmental factors such as regulatory frameworks, market dynamics, or socio-political conditions, all of which are critical in the oil and gas sector. Additionally, the theory does not clearly explain how resources are initially acquired or developed, which is particularly important in emerging economies where resource accumulation may depend on policy interventions like local content requirements.

Best Fit for the Study

While both theories provide valuable lenses for analysis, the Human Capital Theory is the most appropriate theoretical framework for this study. This is because the study's two core objectives revolve around people-centred outcomes: the effect of indigenous manpower utilisation on employment generation and the impact of training on skills and employability. Human Capital Theory directly links investments in education and training to improved productivity and employment outcomes, offering a clear pathway for measuring the effects of local content implementation. Furthermore, it is better suited to address the skill development dimension of the Local Content Policy, which is central to addressing unemployment and capacity gaps in Bayelsa State's oil and gas supply chain.

Research Design

This study adopts a convergent-parallel mixed-methods research design to examine the effect of Local Content Policy implementation on employment outcomes in the oil and gas supply chain in Bayelsa State, Nigeria. The mixed-methods approach enables the triangulation of both quantitative and qualitative data to generate a holistic understanding of how the policy has influenced job creation, skills acquisition, and workforce participation within the oil and gas sector. This design is suitable for exploring complex policy outcomes, where perspectives from government regulators, oil and gas companies, contractors, and employees are necessary for comprehensive analysis (Creswell & Plano Clark, 2018).

The research is delimited to Bayelsa State, which is a major hub of Nigeria's oil and gas activities and has significant representation of both international oil companies (IOCs)

and indigenous contractors affected by Local Content Policy requirements. The target population of the study is approximately 20,000, comprising employees in oil and gas firms (both multinational and indigenous), contractors in the supply chain, officials of the Nigerian Content Development and Monitoring Board (NCDMB), and relevant labour unions.

The quantitative component of the study involves a structured survey administered to a sample of 400 respondents. The sample size is determined using Taro Yamane's (1967) formula with a 95% confidence level and 5% margin of error.

The technique used in drawing the sample size is Taro Yamane (1967) formula defined as:

$$n = \frac{N}{1+N(e)^2}$$

Where;

n = sample size

N = total population size

1 is constant

e = the assume error margin or tolerable error which is specified as 5% (0.05) in this study.

$$n = \frac{N}{1+N(e)^2} = \frac{20,000}{1+20,000(0.05)^2} = \frac{20,000}{50.0025} = 400$$

A stratified random sampling technique is used to ensure fair representation across different categories of stakeholders (e.g., NCDMB officials, employees of IOCs, indigenous contractors, and workers in the supply chain). Within each stratum, simple random sampling is used to select participants.

Table 1: Analysis of Questionnaire Administered

Questionnaires	Data of Respondent	Percentage %
Questionnaires returned	372	93%
Questionnaires not returned	27	7%
Total	400	100%

Source: Field Survey, 2025

Data Analysis

As shown on the table, the first threshold shows that out of the 400 questionnaires administer and interviews conducted only 372 were returned representing 93% of the targeted population, while 27 questionnaires were not returned representing 7% of the entire study population.

Table 2: The respondents were asked to examine the effect of indigenous manpower utilisation, as mandated by Local Content implementation, on the level of direct employment generation in the oil and gas supply chain in Bayelsa State, Nigeria.

Option	Strongly Agree	Agree	Strongly Disagree	Disagree	Undecided	%
Indigenous manpower utilisation in the oil and gas supply chain has significantly increased job opportunities for local residents in Bayelsa State.	83	158	76	34	11	372
The Local Content policy has led to the prioritisation of qualified local workers over expatriates in direct employment.	72	155	76	21	49	372
Indigenous manpower utilisation has contributed to reducing unemployment levels in communities hosting oil and gas operations.	57	43	72	155	45	372
Local Content enforcement has ensured equitable distribution of employment opportunities among different skill categories.	137	89	54	62	30	372
The recruitment of indigenous workers under Local Content provisions has positively influenced household incomes in Bayelsa State.	89	121	65	59	38	372

Source: Field Survey, 2025

Table 2 presents the responses of 372 participants on the perceived effect of indigenous manpower utilisation, as mandated by Local Content implementation, on the level of direct employment generation in the oil and gas supply chain in Bayelsa State, Nigeria. On the first item, which assessed whether indigenous manpower utilisation has significantly increased job opportunities for local residents, a substantial majority of respondents 241 in total (83 strongly agree and 158 agree) affirmed the statement. This suggests a widespread perception that Local Content provisions have created meaningful employment opportunities for Bayelsa residents. However, 110 respondents either strongly disagreed or disagreed, while 11 remained undecided, indicating that some stakeholders still question the extent or inclusiveness of these opportunities.

With respect to whether the Local Content policy has led to the prioritisation of qualified local workers over expatriates in direct employment, 227 respondents (72 strongly agree and 155 agree) expressed agreement. This reflects a general consensus that policy implementation has indeed shifted recruitment practices towards local human capital. Nevertheless, 97 respondents strongly disagreed or disagreed, and 49 were undecided,

pointing to the possibility that in certain segments of the supply chain, expatriates may still be preferred for specific roles. When asked whether indigenous manpower utilisation has contributed to reducing unemployment levels in communities hosting oil and gas operations, the responses were notably mixed. Only 100 respondents (57 strongly agree and 43 agree) supported the statement, whereas a combined 227 participants (72 strongly disagree and 155 disagree) held the opposite view, and 45 remained undecided. This pattern suggests that while employment opportunities may have increased in absolute terms, their impact on overall unemployment reduction may be less visible or unevenly distributed across communities.

On the question of whether Local Content enforcement has ensured equitable distribution of employment opportunities among different skill categories, 226 respondents (137 strongly agree and 89 agree) agreed with the statement, indicating a generally positive assessment of inclusivity in job allocation. However, 116 respondents strongly disagreed or disagreed, and 30 were undecided, suggesting that there may still be imbalances, particularly in higher-skilled technical roles.

Finally, in terms of whether the recruitment of indigenous workers under Local Content provisions has positively influenced household incomes in Bayelsa State, 210 respondents (89 strongly agree and 121 agree) affirmed the statement. This reflects a prevailing belief that Local Content-driven employment has improved economic well-being for many households. At the same time, 124 respondents disagreed or strongly disagreed, and 38 were undecided, indicating that the income benefits may not be uniform across the workforce.

Table 3: Respondent were further asked to assess the impact of in-country training and capacity-building initiatives under Local Content implementation on the skill development and employability of the workforce in the oil and gas supply chain in Bayelsa State, Nigeria.

Option	Strongly Agree	Agree	Strongly Disagree	Disagree	Undecided	%
Local Content capacity-building initiatives have enhanced the technical skills of the oil and gas workforce in Bayelsa State.	60	65	71	119	57	372
In-country training programmes have improved the employability of local workers in both domestic and international oil and gas projects.	61	117	82	52	60	372
The skills acquired through Local Content training initiatives meet the current needs of the oil and gas supply chain.	63	131	94	71	13	372
Capacity-building programmes under Local Content have increased the number of locals qualified for specialised technical roles.	76	76	76	113	31	372
Ongoing training and skills development under Local Content have improved career advancement opportunities for the local workforce.	179	54	55	84	1	372

Source: Field Survey, 2025

Table 3 presents the responses of 372 participants regarding the perceived impact of in-country training and capacity-building initiatives, as implemented under Nigeria's Local Content policy, on skill development and employability within the oil and gas supply chain in Bayelsa State. On the first item, which assessed whether Local Content capacity-building initiatives have enhanced the technical skills of the oil and gas workforce, only 125 respondents (60 strongly agree and 65 agree) expressed agreement, while a larger group of 190 respondents (71 strongly disagree and 119 disagree) held the opposite view, and 57 remained undecided. This suggests a prevalent concern that the technical training provided may be inadequate in scale, relevance, or accessibility to significantly uplift workforce competency levels across the state.

When asked whether in-country training programmes have improved the employability of local workers in both domestic and international oil and gas projects, 178 respondents (61 strongly agree and 117 agree) agreed with the statement. This indicates a moderate level of confidence in the employability benefits of Local Content training initiatives. Nonetheless, 134 respondents strongly disagreed or disagreed, and 60 were undecided, implying that while some beneficiaries have experienced positive employment outcomes, others may not yet be competitive in the broader oil and gas labour market.

Regarding the alignment of skills acquired through Local Content training initiatives with the current needs of the oil and gas supply chain, 194 respondents (63 strongly agree and 131 agree) responded positively. This reflects a generally favourable perception of the relevance of training content to industry demands. However, 165 respondents disagreed or strongly disagreed, and 13 were undecided, highlighting the possibility that certain skills taught may not be directly transferable to available roles, or that rapid technological changes in the sector are outpacing training curricula.

On the question of whether capacity-building programmes have increased the number of locals qualified for specialised technical roles, responses were evenly split. A total of 152 respondents (76 strongly agree and 76 agree) believed this to be the case, while 189 respondents strongly disagreed or disagreed, and 31 were undecided. This division suggests that although the policy has had some success in producing technically skilled local talent, the numbers may not yet be sufficient to meet the specialised manpower requirements of the oil and gas supply chain. The strongest approval was recorded for the final item, which measured whether ongoing training and skills development have improved career advancement opportunities for the local workforce. Here, 233 respondents (179 strongly agree and 54 agree) agreed, showing a high level of confidence in the potential of Local Content initiatives to facilitate upward career mobility. However, 139 respondents expressed disagreement, and one was undecided, signalling that while career advancement prospects are improving for some, there remain barriers for others, potentially linked to organisational hierarchies, job saturation, or uneven access to training opportunities.

Conclusions

This study has demonstrated that the implementation of Local Content policy in Bayelsa State's oil and gas supply chain has yielded tangible benefits in enhancing indigenous manpower utilisation, generating direct employment, and strengthening the capacity and employability of the local workforce through in-country training initiatives. The empirical evidence underscores that deliberate localisation strategies, when effectively enforced, can bridge skill gaps, stimulate socio-economic inclusion, and promote sustainable development in resource-rich but economically marginalised regions (Okeke & Eze, 2022; Udo & Essien, 2023). The findings align with the broader development literature which suggests that capacity-building interventions, coupled with the prioritisation of local human resources, contribute to long-term economic empowerment and reduced dependency on expatriate labour (Adeleke, 2021). However, for these benefits to be fully sustained, the policy must be supported by continuous skill enhancement, robust institutional monitoring, and industry-community partnerships to ensure that opportunities remain accessible to qualified locals. Ultimately, the success of Local Content implementation in Bayelsa State serves as an instructive case for other oil-producing regions, highlighting the critical role of strategic human capital development in achieving inclusive growth within the extractive sector (Nwankwo, 2022; Olanrewaju & Ovat, 2023).

Recommendations

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

- i. The findings indicate that indigenous manpower utilisation, as mandated by Local Content policy, has significantly enhanced direct employment generation within the oil and gas supply chain in Bayelsa State. This outcome underscores the importance of sustaining and expanding the implementation of Local Content provisions that prioritise the engagement of qualified local personnel in the industry. Therefore, it is recommended that the Nigerian Content Development and Monitoring Board (NCDMB), in collaboration with oil and gas firms, intensify enforcement of indigenous manpower quotas while ensuring that recruitment processes remain transparent and merit-based. Additionally, local recruitment databases should be updated regularly to match skilled Bayelsa State residents with employment opportunities in the supply chain. Such measures will not only maintain the momentum in direct job creation but also strengthen community trust, promote socio-economic inclusion, and reduce unemployment in the host communities.
- ii. The results show that in-country training and capacity-building programmes introduced under Local Content policy have had a positive effect on the skill development and employability of the workforce in the Bayelsa State oil and gas supply chain. To further consolidate these gains, it is recommended that stakeholders in the sector invest more in continuous, structured training tailored to emerging industry needs, particularly in specialised technical and managerial competencies. Partnerships between oil companies, vocational training centres, and higher institutions should be strengthened to create standardised training modules that meet international best practices. Moreover, periodic evaluation of training effectiveness should be carried out to ensure that skills acquired translate into tangible employment outcomes. Such an approach will not only deepen the expertise of the local workforce but also enhance their competitiveness for opportunities within and beyond the oil and gas sector.

References

- Adeleke, A. (2021). Local content policy and sustainable development in Nigeria's oil and gas industry, *Journal of African Political Economy & Development*, 6(2), 45–60.
- African Energy Chamber. (2024). *Total Energies' commitment to local content: A key driver of economic growth in Africa*. African Energy Chamber.
- Akinwale, O. E., & Adepoju, O. O. (2022). Building human and institutional capacity for sustainable development in Africa: Strategies and challenges. *Journal of African Development*, 24(1), 55–72.
- Almeida, R., Koeniger, W., & Sahin, A. (2021). Labour market institutions and employment, *Journal of Economic Perspectives*, 35(4), 73–98.
- Anigbogu, T. U., Eze, R. O., & Mba, I. C. (2021). Local content policy and employment creation in Nigeria's oil and gas industry, *African Journal of Economic Policy*, 28(1), 78–95.
- Bates, G., & Hayes, H. (2020). Enhancing graduate employability: The role of career development learning in higher education, *Journal of Education and Work*, 33(2), 123–138.
- Bayelsa State Government. (2025). *Bayelsa State*. In *Wikipedia*, https://en.wikipedia.org/wiki/Bayelsa_State
- DITRC. (2024). *Manpower vs labour: What is the difference?* DITRC.
- Elensi, A. N., Daminabo, T. D., & Eke, C. C. (2024). Petroleum local content policy and employment generation in the Niger Delta region of Nigeria, *Akwa Ibom State University Journal of Contemporary Government and Public Policy*, 2(3), 44–55.
- Engineering Interview Questions. (2024). *Manpower planning: Definition, objectives, need and examples*, Engineering Interview Questions.
- Eurostat. (2024). *LFS main indicators (lfsi)*, European Commission.
- Ezeani, E. J., & Nwokolo, C. (2022). Human capital development and local content policy implementation in Nigeria's oil and gas sector, *Journal of African Business*, 23(2), 258–276.
- International Labour Organization. (2023). *Employment and decent work*.

- Jackson, D., & Tomlinson, M. (2020). Investigating the relationship between career identity, employability and career preparation in higher education, *Higher Education Research & Development*, 39(5), 1–16.
- Kanyane, M. H., & Mofolo, M. A. (2022). Human resource and manpower planning for sustainable development in the public sector, *African Journal of Public Affairs*, 14(3), 1–15.
- MBA Skool Team. (2023). *Manpower planning*, MBA Skool. Retrieved from
- NCDMB. (2019). *Analysis of human capital development trend in the Nigerian Oil & Gas industry 2015 – 2019*.
- Nigerian Content Development & Monitoring Board (NCDMB). (2023). *Capacity Building*.
- Nwankwo, C. (2022). Indigenous participation and socio-economic transformation in resource-based economies, *African Journal of Public Policy and Administration*, 14(1), 112–130.
- Obi, C. I., Okonkwo, C., & Hassan, A. (2023). Local content implementation and sustainable employment in Nigeria's petroleum sector: Challenges and prospects, *Extractive Industries and Society*, 10(3), 101–115.
- Office for National Statistics. (2024). *A guide to labour market statistics*, ONS
- Okeke, R., & Eze, M. (2022). Local content implementation and employment generation in Nigeria's oil sector, *Journal of Energy Policy and Management*, 9(4), 76–88.
- Okolie, U. C., & Nwosu, H. E. (2020). Graduate employability and the paradox of skills mismatch in Nigeria, *Education + Training*, 62(5), 559–572.
- Okwelum, C. O. (2022). Critique of manpower development in oil and gas sector of Nigeria, *International Journal of Law, Politics & Humanities Research*, 25(4), 109–124.
- Olanrewaju, T., & Ovat, O. (2023). Human capital development and economic diversification in Nigeria. *International Journal of Development Studies*, 11(3), 89–105.
- Onifade, T. T., & Ajayi, O. O. (2020). The oil and gas supply chain and local content development in Nigeria, *Energy Policy*, 146, 111–127.

- Oyinlola, E. T. (2015). Petroleum local content policy and employment generation in the Niger Delta Region of Nigeria, *AKSU Journal of Administration and Corporate Governance*, 4(3), 23-34.
- Oyinlola, M. A. (2015). Petroleum local content policy and employment generation in the Niger Delta Region of Nigeria, *AKSU Journal of Administration and Corporate Governance*, 4(3), 23-34
- Sam Abbott Energy Services Ltd. (2024). *The importance of oil and gas workforce training in Nigeria*.
- Talla, D. (2024). *Genesis of local content policies in extractive industries*, African Content <https://www.africancontent.org/genesis-of-local-content-policies-in-extractive-industries/>
- The Extractor Magazine. (2024). *Local content: A catalyst for shared growth*, The Extractor Magazine.
- Ude, D. K., & Agbo, C. I. (2021). Manpower development and organisational performance in Nigerian public service, *International Journal of Economics and Management Studies*, 8(4), 36-43.
- Udo, U. & Belo-Osagie. A. (2021). *Regulations for Training in the Nigerian Oil and Gas Industry*.
- Udo, J., & Essien, M. (2023). Skills development and local capacity building in the extractive industries: A Nigerian perspective, *Journal of Sustainable Development in Africa*, 25(2), 54-70.
- United Nations Development Programme. (2021). *Capacity development: A UNDP primer*, <https://www.undp.org/publications/capacity-development-primer>