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Assessment of Economic Opportunities Available to Vocational and Technical Education Programmes for Sustainable Local Content Policy in The Oil and Gas Sector in Bayelsa State Nigeria

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ABSTRACT: *The study assessed economic opportunities available to vocational and technical education programmes for sustainable local content policy in the oil and gas sector in Bayelsa State, Nigeria. A descriptive survey design was adopted for the study. Two (2) research objectives were formulated to guide the study. The population of the study comprised of all stakeholders in vocational and technical education and oil and gas sector in Bayelsa State. A sample of 230 respondents (180 lecturers from the vocational and technical education in the three tertiary institutions in Bayelsa State and 50 staff of Nigerian Content Monitoring and Development Board from the corporate headquarters). The instrument for data collection was an "Assessment of Economic Opportunities Available to Vocational and Technical Education Programmes Questionnaire" which was developed by researchers and validated by experts. The reliability of the instrument was established using Cronbach Alpha Formula and a coefficient of 0.87 was obtained. The research questions were answered using mean and standard deviation via Statistical Package for Social Science (SPSS) version 26. The findings revealed that lack of adequate local skills and expertise, Limited access to financing for local businesses, insufficient support and incentives for local businesses, limited infrastructure (power, transportation, etc.), poor enforcement of the policy regulations, insufficient efforts to provide training and capacity building programs to enhance local skills and capabilities, lack of information about available opportunities, limited access to networks or partnerships with larger corporations, stringent qualification criteria and regulatory and bureaucratic hurdles are major the challenges inhibiting the implementation of Local content policy in Bayelsa State. It was recommended that The Nigeria Content Monitoring and Development Board should continue to sponsor vocational and technical based programmes that will create the required awareness on the need for indigenous domination of the Oil and Gas Industry.*

KEYWORDS: economic opportunities, vocational and technical education programmes, sustainable, local content policy, oil and gas sector

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INTRODUCTION

The oil and gas sector are the foremost lucrative sector of the Nigerian economy. The desire for Nigeria to exercise greater control on the exploitation, exploration and production activities of oil and gas sector has led to the enactment of the Nigeria Local Content Act, 2010 which is also called the Nigeria Oil and Gas Industry Content Development Law. The Local Content Act offers exciting new potentials for economic development in Nigeria by encouraging economic activity, value addition and job creation.

However, Kebbi (2023) observed that one of the greatest limitations to the implementation of the local content policy is the lack of experienced personnel with adequate technical assignments in the oil and gas sector. Also, Balouga (2012), Sigrid, Akon-Yamga and Mohammed (2011) reported that the full benefit of the local content policy may not be felt if developed skills and capacity are not available. Gaius-Obaseki (2010) further opined that local content policy works optimally to create value where the necessary scientific and technological skills and knowledge are available and utilized.

Ayonmike and Okeke (2015) defined vocational and technical education as a field of study that is concerned with producing learners with the right scientific skills and attitudes needed to pursue science-based disciplines such as engineering, architecture, computer science, etc. They further averred that vocational and technical education is the bedrock upon which scientific and technological development depends.

Charles-Owaba and Omeodu (2018) submitted that maintaining partnerships between tertiary institutions and industry on one hand and industry and government on the other hand is one of the most effective and efficient strategies for technology development in developed nations. The partnership takes different forms, from joint execution of research projects, award of research contract, development of curricula and provision of the idea-based educational system. Mouton (2015) submitted that synergies between higher education institutions and industries can play a critical role in securing and leveraging additional resources for higher education, promoting innovations, technology transfer and ensuring that graduates have the skill and knowledge required to navigate real work life.

Omeodu and Charles-Owaba, (2019) examined the perception of the management of Nigerian Content Monitoring and Development Board (NCDMB) and Science Education Lecturers on how to reposition Science education for sustainable Local content policy. A total of 85 science educators from Universities and Colleges of Education in Bayelsa State and staff of NCDMB participated in the study. Descriptive survey design was employed and the instrument for data collection was “Repositioning Science Education Programme for Sustainable Local Content Policy Questionnaire.” The instrument attained a reliability coefficient of .79 using Kudder-Richardson (21) formula, which was considered appropriate. The data gathered was analyzed using mean and standard deviation, while the 3 research hypotheses were tested using t-test statistic. The results showed that the current position of science education is inadequate in terms

of resources and without the capacity to equip students with the requisite attributes. It was recommended that government and NCMBD should endeavor to invest their resources on science education in order to help in repositioning for a sustainable local content policy

Omeodu and Charles-Owaba, (2019) investigated how Nigerian local content Act and Science Education can bring about sustainable development in Nigeria. The concept of science and science education, local content and Nigerian local content Act were discussed. The provisions of Nigerian Content Act and how it can improve science education for sustainable development was highlighted. It is recommended that the Board responsible for the Implementation of the Nigerian Local Content Act should collaborate with Science and Technical Education institutions and personnel for the successful implementation and sustenance of the Act.

Kebbi, (2023) assessed the contributions of Nigerian Content Monitoring and Development Board towards the development of science education in secondary schools in Bayelsa State, Nigeria. A total of 385 science teachers from the 193 secondary schools in Bayelsa State and staff of NCDMB participated in the study. Descriptive survey design was employed and the instrument for data collection was "Contributions to the Development of Science Education Questionnaire" which was developed by the researcher and validated by experts. The reliability of the instrument was established using Cronbach Alpha and a coefficient of .79 using was obtained, which was considered appropriate. The data gathered was analyzed using mean and standard deviation. The findings revealed programmes, the extent of utilization and the factors hindering the successful implementation of NCMDB programmes for the development of science education in Bayelsa State. It was recommended that government and NCMBD should endeavor to invest their resources on science education in order to help in repositioning for a sustainable local content policy.

Implementing the local content policy requires skilled personnel in the oil and gas sector, and vocational and technical education on the other hand, needs the right collaboration with the oil and gas sector to enable it to produce the required scientific and technical skills and attitudes. To this end, this the study assessed economic opportunities available to vocational and technical education programmes for sustainable local content policy in the oil and gas sector in Bayelsa State, Nigeria.

Statement of the Problem

The objective of the Act is to increase indigenous participation in the oil and gas industry. The Act is designed to promote local participation within the industry, that is, Nigerian incorporated companies. The Act is framed within the context of growth of Nigerian entrepreneurship and domestication of assets to fully realize Nigeria's strategic developmental goals. This implies that the execution of any project in the oil and gas sector will require the engagement of the skills available in the catchment areas before looking outside.

Bayelsa, a state endowed with crude oil and natural gas as well as an active youth population is yet to advance economically. Up till this moment, the state comfortably occupies the third poorest state in Nigeria (NBS, 2022) with many of its young population unemployed. The oil

and gas sector are heavily flooded with non-indigenes; hence the state is not optimizing the benefits of the local content policy. Hence, this study assessed economic opportunities available to vocational and technical education programmes for sustainable local content policy in the oil and gas sector in Bayelsa State, Nigeria.

Aim and Objectives of the Study

The study assessed economic opportunities available to vocational and technical education programmes for sustainable local content policy in the oil and gas sector in Bayelsa State, Nigeria. Specifically; this study achieved the following:

i. Determine the challenges inhibiting the implementing of Local content policy in Bayelsa State.
ii. Determine the economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State.

Research Questions

The following research questions were formulated to guide the study:

i. What are the challenges inhibiting the implementation of Local content policy in Bayelsa State?
ii. What are the economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State?

METHODS AND MATERIALS

This study adopted a descriptive survey design. Lawrant (2018), defined descriptive survey research design as the one in which a group of people or item is studied by collecting analyzing data from only a few individuals or items considered to be representatives of the entire group. This design is appropriate for this study since information will be gathered from a sample of the population who are familiar with the ideas relating to the purpose of the study with the aim of generalizing the results for the entire population. The area of the study is Bayelsa State. The population of the study comprise of all stakeholders in vocational and technical education and oil and gas sector in Bayelsa State. A sample of 230 respondents (180 lecturers from the vocational and technical education in the three tertiary institutions in Bayelsa State and 50 staff of Nigerian Content Monitoring and Development Board from the corporate headquarters). The instrument for data collection was an "Assessment of Economic Opportunities Available to Vocational and Technical Education Programmes Questionnaire" formatted in four–point rating scale. It consists of two (2) parts, namely; part I and II. Part I measured the demographic variables of the respondents, while part II is further divided into: Section A and B. Section A, consist of a 10-item on the challenges inhibiting the implementation of Local Content Policy and B consist of 6 items on the economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy. The instrument was validated by specialist of Tests and Measurement and Vocational and Technical Education. Their corrections and suggestions resulted to the final draft used in the study. The instrument was trial tested using ten (10) other VOCTECH Experts and ten (10) staff of Nigeria Content Monitoring Development Board that did not participate in the study but possess the same

characteristics of the population of interest. The reliability of the instrument was established using Cronbach Alpha Formula. A calculated reliability coefficient of .79 was achieved and was considered appropriate. The researchers administered the instruments to the respondents by direct contact and a 100% return rate was achieved. Mean and Standard deviation were used to analyzed the research question. Items with mean value of 2.50 and above were agree, while those with mean value below 2.50 were termed to be disagree.

ANALYSIS AND RESULTS

Research Question 1

What are the challenges inhibiting the implementation of Local content policy in Bayelsa State?

Table 1: Mean and standard deviation of respondents on challenges inhibiting the implementation of Local Content Policy in Bayelsa State

S/N	STATEMENTS	x	S.D.	Remark
1.	Lack of adequate local skills and expertise	3.1549	0.43688	Major
2.	Limited access to financing for local businesses	3.2637	0.49714	Major
3.	Insufficient support and incentives for local businesses	3.4363	0.49714	Major
4.	Limited infrastructure (power, transportation, etc.)	3.4363	0.49714	Major
5.	Poor enforcement of the policy regulations	3.5673	0.49714	Major
6.	Insufficient efforts to provide training and capacity building programs to enhance local skills and capabilities	3.1549	0.43688	Major
7.	Lack of information about available opportunities	3.1549	0.43688	Major
8.	Limited access to networks or partnerships with larger corporations	3.2637	0.49714	Major
9.	Stringent qualification criteria	3.4363	0.49714	Major
10.	Regulatory and bureaucratic hurdles	3.4363	0.49714	Major

Source: Fieldwork (2023)

Table 1 shows the Mean and standard deviation of respondents on challenges inhibiting the implementation of Local Content Policy in Bayelsa State. The result revealed that all items had mean values above the criteria value of 2.50. This implies that lack of adequate local skills and expertise, Limited access to financing for local businesses, insufficient support and incentives for local businesses, limited infrastructure (power, transportation, etc.), poor enforcement of the policy regulations, insufficient efforts to provide training and capacity building programs to enhance local skills and capabilities, lack of information about available opportunities, limited access to networks or partnerships with larger corporations, stringent qualification criteria and regulatory and bureaucratic hurdles are major the challenges inhibiting the implementation of Local content policy in Bayelsa State.

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Research Question 2
What are the economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State?

Table 2: Mean and standard deviation of respondents on economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State

S/N	STATEMENTS	x	S.D.	Remark
1.	Government Support and Investment	2.30	0.91	Minor
2.	Improved quality of Vocational and Technical Education Programmes	3.35	0.83	Major
3.	Creation of employment opportunities for Graduates of Vocational and Technical Education Programmes	2.75	0.79	Major
4.	Provision of practical learning opportunities (internships, apprenticeships, etc.) within industries linked to the Local Content Policy for students enrolled in vocational and technical education programmes.	2.89	0.80	Major
5.	Provision of Industry Partnerships and Collaborations in vocational and technical education programmes.	2.35	0.81	Minor
6.	Perceived Integration of Vocational & Technical Education with Local Content Policy	2.59	0.81	Major

Source: Fieldwork (2023)

Table 2 above shows the mean and standard deviation of respondents on economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State. The result revealed that all items had mean value above the cut-off mean value of 2.50, which implies that all respondents from agreed. Hence**,** government support and investment, improved quality of vocational and technical education, creation of employment opportunities for graduates of vocational and technical education, Provision of practical learning opportunities (internships, apprenticeships, etc.) within industries and perceived integration of vocational and technical education into the local content policy are major economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State.

DISCUSSION OF FINDINGS

The discussion of findings was done based the research questions.
The challenges inhibiting the implementing of Local content policy in Bayelsa State.
The study revealed that lack of adequate local skills and expertise, Limited access to financing for local businesses, insufficient support and incentives for local businesses, limited infrastructure (power, transportation, etc.), poor enforcement of the policy regulations, insufficient efforts to provide training and capacity building programs to enhance local skills and capabilities, lack of information about available opportunities, limited access to networks or partnerships with larger corporations, stringent qualification criteria and regulatory and

bureaucratic hurdles are major the challenges inhibiting the implementation of Local content policy in Bayelsa State. This finding is consistent with the findings of Charles-Owaba and Omeodu (2019), who submitted that the that lack of technical manpower is a major barrier to the implementation of local content policy in the oil and gas sector.

The economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State.

The study revealed that government support and investment, improved quality of vocational and technical education, creation of employment opportunities for graduates of vocational and technical education, Provision of practical learning opportunities (internships, apprenticeships, etc.) within industries and perceived integration of vocational and technical education into the local content policy are major economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State. These findings are in agreement with the findings of Omeodu and Charles-Owaba (2019), Charles-Owaba and Moses (2018), Ihua (2010), who submitted that aligning with the Local Content Policy can trigger the usefulness vocational and technical education programmes in Bayelsa State.

CONCLUSION

The study assessed economic opportunities available to vocational and technical education programmes for sustainable local content policy in the oil and gas sector in Bayelsa State, Nigeria. The study has established that lack of adequate local skills and expertise, Limited access to financing for local businesses, insufficient support and incentives for local businesses, limited infrastructure (power, transportation, etc.), poor enforcement of the policy regulations, insufficient efforts to provide training and capacity building programs to enhance local skills and capabilities, lack of information about available opportunities, limited access to networks or partnerships with larger corporations, stringent qualification criteria and regulatory and bureaucratic hurdles are major the challenges inhibiting the implementation of Local content policy in Bayelsa State. Also, the study has affirmed that government support and investment, improved quality of vocational and technical education, creation of employment opportunities for graduates of vocational and technical education, Provision of practical learning opportunities (internships, apprenticeships, etc.) within industries and perceived integration of vocational and technical education into the local content policy are major economic opportunities available to vocational and technical education programmes in the implementation of Local Content Policy in Bayelsa State.

Recommendations

Based on the findings of this research, the following recommendations were made:

1. The government of Bayelsa State, Nigeria Content Monitoring Development Board and other stakeholders should ensure that appropriate resources (both financially and otherwise) are allocated to vocational and technical education, in order to help harness the economic opportunities in Local Content Policy for sustainable development.

2. The Nigeria Content Monitoring and Development Board should continue to sponsor vocational and technical based programmes that will create the required awareness on the need for indigenous domination of the Oil and Gas Industry

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