

## **Role of Local Government Environmental Impact Assessments on Sustainable Development Projects of Local Entrepreneurship in Yobe State, Nigeria**

By

**Umar Mustapha Kachalla Ph. D**

**Department of Business Administration, Federal University, Gashu'a**

**Mail: kachallaumar19@gmail.com**

**+2348062648698**

**And**

**Habu Baya- Yaye Adamu Ph. D**

**Department of Business Administration, Yobe State University Damaturu**

**Mail: abusufyanha2@yahoo.com**

**+2348067298485**

### **Abstract:**

*This study explored the role of local government environmental impact assessments on fostering sustainable development in Yobe State, Nigeria. Using a survey research design, data were collected through a structured questionnaire employing a five-point Likert scale to assess the role of Local Government Environmental Impact Assessments on Sustainable Development Projects Of Local Entrepreneurship In Yobe State, Nigeria , social sustainability (SOC\_SUS), economic sustainability (ECO\_SUS), and environmental sustainability (ENV\_SUS). A total of 399 questionnaires were distributed, with 360 returned, resulting in a 90.22% response rate. The findings indicate that local government impact assessment significantly influences economic and environmental sustainability but does not significantly affect social sustainability. These results underscore the importance of citizen participation and capacity building in environmental decision-making. The study identifies challenges such as limited awareness and resource access that impede social sustainability efforts. In conclusion, enhancing local government effectiveness through targeted capacity-building programs, increased transparency, and stakeholder engagement can promote sustainable practices. Recommendations include improving communication between local governments, communities, and NGOs, as well as investing in participatory planning and enforcement mechanisms. Ultimately, effective local governance can create integrated policies that align environmental, social, and economic goals, fostering sustainable development in Yobe State.*

**Keyword:** LEIA; Effectiveness; Community; Development; Entrepreneurship.

### **1.1 Introduction**

Environmental Impact Assessments (EIAs) are systematic processes used to evaluate the potential environmental effects of proposed projects or developments before they are carried out. They aim to ensure that decision-makers consider environmental impacts and integrate ecological concerns into planning and development processes. The EIA process typically involves several stages: scoping, assessment of potential impacts, public participation, and decision-making (Glasson et al., 2012).

In Nigeria, the EIA process is guided by the Environmental Impact Assessment Act of 1992 and its subsequent amendments (Odo & Obaji, 2017). The Nigerian legal framework

emphasizes the responsibility of both federal and state-level agencies, including local governments, to ensure that EIAs are conducted. Local governments play a crucial role in this process, especially concerning community development projects and local entrepreneurship, as they have closer oversight over local resources and environmental sustainability.

Yobe State, located in northeastern Nigeria, is characterized by its complex socio-economic landscape marked by economic opportunity and environmental challenges. The state has faced significant challenges due to recent conflicts, leading to pressing needs for sustainable development and a robust local economy (World Bank, 2020). Local governments in Yobe State are positioned to influence entrepreneurial ventures significantly, particularly by facilitating a regulatory environment that fosters economic growth while safeguarding environmental sustainability.

For entrepreneurs, engaging with the EIA process can lead to several advantages, such as a better understanding of environmental regulations, improved project planning, and enhanced community relations. Properly implemented EIAs can help entrepreneurs identify potential environmental risks and compliance requirements earlier in the project development process, potentially leading to cost savings and reduced legal liabilities (Barrow & Barrow, 2016). Furthermore, as societal awareness of environmental issues grows, businesses that engage in sustainable practices may enhance their competitive advantage (Milanova, 2021). Entrepreneurs in Yobe State could leverage the EIA process to align their business strategies with sustainable development goals, contributing to local economic resilience. Given the socio-economic context of Yobe State and the imperative for environmentally sustainable entrepreneurship, understanding the role of local government EIAs is crucial for new ventures. The interplay between these assessments and entrepreneurial activities can catalyze sustainable development within the state while addressing the pressing environmental concerns endemic to the region.

## **1.2 Statement of the Problem**

Entrepreneurship is critical for economic development, particularly in regions like Yobe State, Nigeria, where there is an urgent need for economic diversification and resilience due to socio-economic challenges, including prolonged conflict and environmental degradation (World Bank, 2020). However, the potential growth of entrepreneurial ventures in Yobe State is often hampered by insufficient understanding and application of Environmental Impact Assessments (EIAs) at the local government level (Odo & Obaji, 2017). Local governments have a responsibility to oversee the EIA process, yet there is a notable lack of effective implementation, capacity building, and awareness regarding the benefits of EIAs among entrepreneurs in the region (Milanova, 2021).

Many entrepreneurs in Yobe State may not be fully cognizant of the necessity of conducting EIAs as part of their business planning processes. This gap can lead to projects that unintentionally inflict harm on the environment, violate regulatory requirements, or face public opposition (Barrow & Barrow, 2016). The resultant ignorance can result in legal liabilities, loss of investment opportunities, and adverse impacts on community health and local ecosystems (Glasson et al., 2012). Moreover, without a clear framework for integrating environmental considerations into business operations, entrepreneurs may overlook

opportunities to innovate and secure investments that prioritize sustainability (Milanova, 2021).

Thus, the problem can be articulated as follows: How can local government EIAs be effectively integrated into entrepreneurial practices in Yobe State to promote sustainable economic development while minimizing environmental impacts? This study aims to investigate this gap, exploring the challenges and opportunities that exist for local governments and entrepreneurs to ensure that economic activities align with environmental sustainability. By addressing this issue, the research seeks to inform policy recommendations that enhance the role of EIAs in fostering a more resilient and sustainable entrepreneurial ecosystem in Yobe State.

### **1.3 Objectives of the study**

1. Evaluate the effect of local government environmental impact assessments on social sustainability of local Entrepreneurship in Yobe State, Nigeria
2. Investigate the effect of local government environmental impact assessments on economic sustainability of local Entrepreneurship in Yobe State, Nigeria
3. Determine the effect of local government environmental impact assessments on environmental sustainability of local Entrepreneurship in Yobe State, Nigeria

### **1.4 Hypotheses of the study**

$H_{01}$ : Local government environmental impact assessments have no significant effect on social sustainability of local Entrepreneurship in Yobe State, Nigeria

$H_{02}$ : Local government environmental impact assessments have no significant effect on economic sustainability of local Entrepreneurship in Yobe State, Nigeria

$H_{03}$ : Local government environmental impact assessments have no significant effect on environmental sustainability of local Entrepreneurship in Yobe State, Nigeria.

## **2.1 LITERATURE REVIEW/ THEORETICAL UNDERPINNING**

### **2.3 Theoretical Review**

The Theory of Sustainable Development emphasizes the need for businesses to operate in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs. This theory advocates for a holistic approach that integrates economic growth, environmental protection, and social equity (UN Brundtland Commission, 1987). In the context of entrepreneurship, sustainable development encourages entrepreneurs to adopt practices that not only seek profit but also promote environmental stewardship and social responsibility (Schaltegger & Wagner, 2011). By embedding sustainability into their business models, entrepreneurs can create value that aligns with the growing demand for sustainable products and services, ultimately contributing to long-term economic resilience and community well-being (Dyllick & Hockerts, 2002).

Recent studies have shown that businesses prioritizing sustainability tend to achieve competitive advantages, such as enhanced customer loyalty and improved risk management (Milanova, 2021). Furthermore, entrepreneurs who integrate sustainable practices into their operations often find innovative solutions that address both environmental challenges and market needs, fostering a more sustainable entrepreneurial ecosystem (Cohen et al., 2017).

## 2.1 Definition and Purpose of EIAs

Environmental Impact Assessments (EIAs) are systematic processes designed to evaluate the potential environmental effects of proposed projects before they are implemented. The primary purpose of EIAs is to inform decision-makers about the environmental implications of their actions, enabling them to make more informed choices that minimize negative impacts on the environment and society (Glasson et al., 2012). Furthermore, EIAs encourage sustainable development by integrating environmental considerations into project planning and fostering public participation (Barrow & Barrow, 2016). By identifying potential adverse effects, EIAs seek to enhance project outcomes while protecting natural resources and promoting ecological sustainability (Morris & Therivel, 2009).

## 2.2 Overview of the EIA Process and Its Objectives

The EIA process typically consists of several key stages, including:

1. **Screening:** Determining whether a proposed project requires an EIA based on its size, nature, and potential impacts.
2. **Scoping:** Identifying the specific issues and concerns to be addressed in the assessment.
3. **Impact Assessment:** Evaluating the potential positive and negative effects of the project on the environment, including social, economic, and cultural dimensions.
4. **Mitigation Measures:** Proposing measures to avoid, reduce, or mitigate adverse impacts identified during the assessment.
5. **Reporting:** Compiling the findings into an Environmental Impact Statement (EIS) that presents the assessment results and recommendations.
6. **Decision-Making:** Local or national authorities review the EIS and decide whether to approve the project, request modifications, or deny it (Glasson et al., 2012; Odo & Obaji, 2017).

## 2.3 Legal Framework for EIAs in Nigeria

In Nigeria, the legal framework governing EIAs is primarily established by the Environmental Impact Assessment Act of 1992 (EIA Act), which outlines the requirements and procedures for conducting EIAs within the country. This act mandates that any proposed project likely to significantly impact the environment must undergo an EIA (Odo & Obaji, 2017).

## 2.4 Key aspects of the EIA Act include:

- ¤ Project Categorization: The Act categorizes projects into those requiring a full EIA and those that do not, based on their potential environmental impacts.
- ¤ Public Participation: The EIA process incorporates public consultation and stakeholder engagement, allowing affected communities to contribute their views and concerns (Nwankwo et al., 2019).
- ¤ Regulatory Oversight: The Act empowers the Federal Ministry of Environment and relevant state ministries to enforce compliance and regulate EIAs, although challenges remain regarding capacity and resources for effective implementation (Odo, 2016).

## 2.5 The Role of Local Governments in EIAs:

Local governments play a critical role in the Environmental Impact Assessment (EIA) process, particularly in the context of project approval and environmental management at the community level. Their responsibilities typically include **screening** projects to determine the necessity of an EIA, overseeing the **implementation** of the EIA process, coordinating public

consultations, and ensuring compliance with environmental regulations (Odo & Obaji, 2017). Local governments also facilitate stakeholder engagement, allowing community voices to be heard and considered in decision-making (Nwankwo et al., 2019). Moreover, they are tasked with monitoring and enforcing compliance with the mitigation measures identified in the EIA to minimize adverse environmental impacts (Adewumi & Akinola, 2021).

## **2.6 Challenges Faced by Local Governments in Implementing Effective EIAs**

Despite their crucial roles, local governments often face significant challenges in implementing effective EIAs. These challenges may include **limited resources**, such as insufficient funding and technical expertise, which hinder their capacity to conduct thorough assessments (Nwankwo et al., 2019). Additionally, bureaucratic inefficiencies and inadequate training among personnel can lead to delays and reduced effectiveness in the EIA process (Adewumi & Akinola, 2021). Furthermore, local governments sometimes struggle with establishing adequate frameworks for public participation, which can result in insufficient community engagement and transparency, ultimately undermining the EIA objectives (Odo, 2016).

## **2.7 Impact of EIAs on Small and Medium-Sized Enterprises (SMEs) and Local Entrepreneurs**

Environmental Impact Assessments significantly affect small and medium-sized enterprises (SMEs) and local entrepreneurs. The EIA process can serve as a mechanism for identifying potential environmental risks and compliance requirements early in project planning, which is crucial for SMEs that typically operate with limited resources (Milanova, 2021). Properly conducted EIAs can prevent unforeseen regulatory challenges and legal liabilities, thereby enhancing the likelihood of project success (Cohen et al., 2017). Additionally, businesses that prioritize environmental considerations may align better with market demands for sustainability, allowing them to capitalize on emerging opportunities (Dyllick & Hockerts, 2002).

## **2.8 Benefits of EIAs for Entrepreneurs, Including Risk Management and Community Relations**

The benefits of EIAs for entrepreneurs extend beyond compliance; they also include improved **risk management** and enhanced **community relations**. By identifying potential environmental impacts, entrepreneurs can develop strategies to mitigate those risks and avoid costly setbacks (Morris & Therivel, 2009). Moreover, engaging local communities through the EIA process can foster trust and support, leading to stronger relationships that can be beneficial for business operations and reputation (Bourne & Walker, 2006). Overall, the integration of EIAs into entrepreneurial projects can contribute to sustainable development goals while promoting economic resilience within local communities.

### **Stakeholder Engagement in the EIA Process**

Stakeholder engagement is a critical component of the Environmental Impact Assessment (EIA) process, as it ensures that the perspectives, concerns, and knowledge of all affected parties are integrated into decision-making (Reed, 2008). Community involvement is particularly important, as it helps to identify potential environmental impacts that may not be immediately apparent to developers or governments. Effective engagement allows local communities, indigenous groups, and other stakeholders to voice their opinions and influences the design and implementation of projects to better reflect local needs and values

(Danielsen et al., 2017). Moreover, incorporating diverse stakeholder input can enhance the legitimacy and public acceptance of EIA findings, reducing the likelihood of conflicts and opposition during the project lifecycle (Bryson et al., 2013).

## **2.9 Benefits of Enhanced Stakeholder Engagement for Entrepreneurs and Local Governments**

Enhanced stakeholder engagement in the EIA process presents numerous benefits for both entrepreneurs and local governments. For entrepreneurs, engaging stakeholders fosters stronger **community relations**, which can lead to greater public support for their projects, mitigating potential opposition and facilitating smoother project implementation (Bourne & Walker, 2006). Furthermore, involving stakeholders can provide valuable insights into local environmental issues and community expectations, enabling entrepreneurs to develop more socially and environmentally responsible business practices (Cohen et al., 2017).

For local governments, effective stakeholder engagement enhances the **transparency** and **accountability** of the EIA process, leading to improved public trust (Nwankwo et al., 2019). When local governments actively involve community members and other stakeholders, they can better anticipate potential concerns and maximize the benefits of environmental policies and regulations. This collaborative approach can also foster a shared sense of ownership and responsibility for local development initiatives, ultimately contributing to more sustainable outcomes for the community (Reed, 2008).

## **2.10 Empirical Review**

On the study of Smith & Patel (2023) investigated the Local Government and Community Development: An Impact Assessment Framework, aimed to create a comprehensive framework for evaluating the effects of local government initiatives on community development and entrepreneurship. Utilizing qualitative interviews with local officials and community leaders, along with detailed case studies of specific projects, the authors found that effective local government initiatives enhance community engagement and bolster support for local businesses. They recommend the implementation of regular impact assessments and the establishment of partnerships between local governments and community organizations. However, the study identifies a gap in quantitative data regarding the long-term economic impacts of these initiatives. Johnson & Wong (2024) Evaluating the Role of Local Governments in Supporting Entrepreneurship: A Case Study Approach, sought to assess the effectiveness of local government programs aimed at fostering entrepreneurship. Their mixed-methods approach combined surveys of local entrepreneurs with analyses of government program data. The findings revealed that local government support programs significantly boost entrepreneurial success rates, especially in underserved communities. The authors recommend increasing funding for these programs and improving access to resources for local businesses. They note a gap in the research concerning longitudinal studies that could evaluate the sustainability of these program impacts over time.

Thompson & Garcia (2023) Consider Local Governance and Economic Resilience: A Comparative Study, sought to investigate the influence of local governance structures on community resilience and economic recovery during crises. Using comparative case studies of municipalities impacted by economic downturns, the authors conducted interviews and analyzed economic performance data. Their findings indicated that strong local governance is associated with faster economic recovery and greater community resilience, highlighting

the importance of proactive local policies. They recommend developing crisis management frameworks and strengthening community networks to enhance resilience. However, the study notes a gap in understanding how cultural factors affect the effectiveness of local governance.

Nguyen & Brown (2024) *The Role of Local Government in Fostering Sustainable Entrepreneurship*, aimed to evaluate the effectiveness of local government initiatives designed to promote sustainable entrepreneurship. Their methodology involved surveying local entrepreneurs and conducting a policy analysis to assess various sustainability initiatives. The study found that local governments prioritizing sustainability attract more entrepreneurial ventures and contribute positively to community well-being. The authors recommend increasing investments in sustainable development programs and providing training for entrepreneurs. They also identify a gap in empirical data linking sustainability initiatives directly to economic performance.

Green & Lopez (2023) *Sustainable Development Goals and Local Government: An Integrated Approach* aimed to examine the effectiveness of local governments in implementing Sustainable Development Goals (SDGs) within their communities. The researchers conducted case studies of municipalities that successfully integrated SDGs into local policies. Their findings revealed that local governments adopting a holistic approach to SDGs experience improvements in community engagement and resource management. They recommend fostering collaboration among local governments, NGOs, and community stakeholders to enhance SDG achievement. However, the study highlights a gap in the availability of long-term impact data on SDG implementation at the local level.

Martin & Johnson (2024) *The Role of Local Governments in Promoting Circular Economy Practices* explored the effectiveness of local government initiatives designed to promote circular economy practices. Utilizing surveys and interviews with local officials and businesses engaged in circular economy strategies, they found that local governments play a critical role in facilitating such initiatives, resulting in reduced waste and increased resource efficiency. The authors recommend developing training programs for local businesses on circular economy practices and policies. They also note a gap in empirical studies linking circular economy initiatives to economic outcomes.

Zhou & Patel (2022) *Assessing the Impact of Urban Green Spaces on Community Well-Being*, evaluated the contributions of urban green spaces to community well-being and sustainable urban development. Employing a mixed methods approach that included resident surveys and urban planning data analysis, their findings indicated that increased access to green spaces is associated with improved mental health, social cohesion, and environmental quality. They recommend prioritizing the development of urban green spaces in city planning efforts, while acknowledging a gap in research regarding the economic benefits of such spaces.

Ahmed & Chen (2023) *Observe Community-Based Approaches to Sustainable Development: Lessons from Global Practices*, sought to identify best practices for community-based sustainable development initiatives worldwide. Through a comparative analysis of successful community-led projects across various countries, their findings emphasized the importance of community engagement and local leadership for the success of sustainable development

efforts. The authors recommend fostering local capacity building and participatory governance to enhance community-led projects. They also highlight a gap in the need for longitudinal studies to assess the sustainability of these initiatives over time.

Martinez & Chen (2023) Evaluating the Impact of Local Government Investments on Community Development, aimed to assess how local government financial investments in infrastructure affect community development. Utilizing a mixed methods approach, they analyzed investment data alongside community surveys to evaluate perceived impacts. The findings indicated that infrastructure investments lead to improved economic conditions and increased community satisfaction. The authors recommend prioritizing infrastructure investments in underserved areas to maximize community benefits. However, they note a gap due to the lack of longitudinal data that could provide insights into the long-term impacts of such investments.

### **2.11 Analysis of Findings Related to the Study's Context**

These empirical findings are particularly relevant to the context of Yobe State, Nigeria, where entrepreneurship is essential for economic recovery and development. The studies suggest several implications for local entrepreneurs and the integration of EIAs:

- ξ **Enhanced Business Resilience:** The findings underscore that integrating EIAs can build resilience among businesses by preemptively addressing environmental challenges. Given Yobe State's unique socio-economic context, where conflict and environmental factors significantly affect livelihoods, implementing EIAs could help entrepreneurs navigate potential pitfalls and adapt to changing circumstances.
- ξ **Regulatory and Funding Opportunities:** The evidence from Kenya's experience indicates that Yobe State's entrepreneurs could benefit similarly from improved regulatory compliance through the successful execution of EIAs. Such compliance does not only limit legal liabilities but may also open doors to funding opportunities from both governmental and international sources aimed at promoting sustainable development (World Bank, 2020).
- ξ **Strengthened Community Relations:** Moreover, the findings from South Africa about stakeholder engagement highlight the significance of fostering positive community relationships in Yobe State. By involving local stakeholders throughout the EIA process, entrepreneurs can enhance their social license to operate, which is crucial in an environment where community support can make a difference between project success and failure.
- ξ **Need for Capacity Building:** Overall, the studies indicate a pressing need for capacity-building initiatives that equip local governments and entrepreneurs in Yobe State with the necessary tools, knowledge, and resources to effectively conduct EIAs. Implementing training programs and fostering partnerships could enhance the EIA process, encouraging entrepreneurship that is both economically viable and environmentally sustainable.

### **3.1 Methodology**

In this study, the survey research design was adopted and the data was collected through the distribution of questionnaire. The nature of the questionnaire used for this study was a five-point Likert-scale, ranging from "strongly agree" to "strongly disagree" (5 = 'Strongly Agree', 4 = 'Agree', 3 = 'Undecided', 2 = 'Disagree' and 1 = 'Strongly Disagree') to reflect the agreement of the respondents on Local Government Effectiveness (LGE), social

sustainability (SOC\_SUS), economic sustainability (ECO\_SUS), and environmental sustainability (ENV\_SUS).

The population of this study is 109,124 (National Population Commission, 2006). The sample size was estimated with Yamane 1976 formula which resulted in sample size of 399. A total of 399 questionnaires were administered, only a total of 360 were returned giving a response rate of 90.22%. The data for this study was subjected to data cleaning tests and certified for the final analysis.

### 3.2 Method of Data Analysis

Data analysis was conducted using partial least square (PLS) software 4.9.0.0, an approach to structural equation modeling and presented as required. The SEM is an extension of the general linear model (GLM) that enables a researcher to test a set of regression equations simultaneously. SEM is of two methods; Variance Based Structural Equation Modelling (VB-SEM) and the Covariance Based Structural Equation Modelling (CB-SEM). While the VB-SEM also known as Partial Least Square Structural Equation Modelling (PLS-SEM) requires small sample size and little or no fitness tests. There are four critical issues relevant to the application of PLS-SEM.

- (1) The data: PLS-SEM works efficiently with small sample sizes,
- (2) Model properties: and complex models and makes practically no assumptions about the underlying data (in terms of data distribution)
- (3) The PLS-SEM algorithm: can easily handle reflective and formative measurement models
- (4) Model evaluation issues: PLS-SEM as well as single-item construct, is a tool with no identification problems. It can therefore be applied in a wide range of research situations.

Two broad evaluations were done: the measurement model, and the structural model.

### 3.3 Measurement model

The measurement model is the extent of assessing of the constructs involved in the study, which is to determine whether the indicators such as, Composite reliability (CR), convergent validity, average variance extracted (AVE) and discriminant validity, as described by Hair et al. (2011), Hair, Sarstedt, et al. (2012) and Henseler, Ringle, and Sinkovics (2009) met their required threshold.

**Table 1: Convergent Validity**

	Indicators	Factor Loading	CR	AVE
Environmental performance	EPI2	0.769	0.824	0.7
	EPI4	0.902		
Business sustainability	BSM1	0.672	0.816	0.6
	BSM3	0.817		
Environmental awareness	BSM4	0.824	0.789	0.56
	EAL1	0.808		
Entrepreneurial success	EAL3	0.72	0.826	0.61
	EAL4	0.705		
	ESM1	0.774		
	ESM2	0.842		

Social sustainability	ESM4	0.73		
	SOS4	0.834	0.853	0.74
	SOS5	0.891		

The result in Table 1 shows the convergent validity for the constructs under study. The results thus demonstrated a high level of convergent validity of the latent construct and used in the model. An AVE value of at least 0.5 indicates sufficient convergent validity, meaning that a latent variable can explain at least half of the variance of its indicators on average.

**Table 2: Fornell-Lacrker Discriminant Validity**

	<b>ECO_SUS</b>	<b>ENV_SUS</b>	<b>LGE</b>	<b>SOC_SUS</b>
<b>ECO_SUS</b>	<b>0.746</b>			
<b>ENV_SUS</b>	0.741	<b>0.783</b>		
<b>LGEIA</b>	0.58	0.578	<b>0.838</b>	
<b>SOC_SUS</b>	0.718	0.692	0.553	<b>0.774</b>

Table 2 show the discriminant validity result. The diagonal bolden values are greater than inner values. Thus, indicating that discriminant validity was established among constructs since all values fall within the acceptable region.

### 3.4 Evaluation of the structural model

Structural model fitness is examined after measurement model assessment has been met and fitness is shown to be acceptable. The structural or inner model consists of the factors and the arrows that connect one factor to another. The loadings of the direct paths connecting factors are standardized regression coefficients. To ensure that the final estimated result from the PLS is true, it is important to determine the fitness of the model. The fitness of the model can be assessed in the following ways: testing for collinearity of the structural model, assessing the significance and relevance of the structural model relationships, the level of the  $R^2$  values, the  $f^2$  effect size and the standardized root mean square residual (SRMR) (Tenenhaus, Vinzi, Chatelin & Lauro 2005). Höck & Ringle, (2006: 15) described results above the cutoffs 0.67, 0.33 and 0.19 to be “substantial”, “moderate” and “weak” respectively. The R-square here would be of moderate strength or effect.

To assess multicollinearity in the structural model, tolerance or VIF criteria may be applied, discussed, and illustrated. The VIF benchmark should be less than 4.

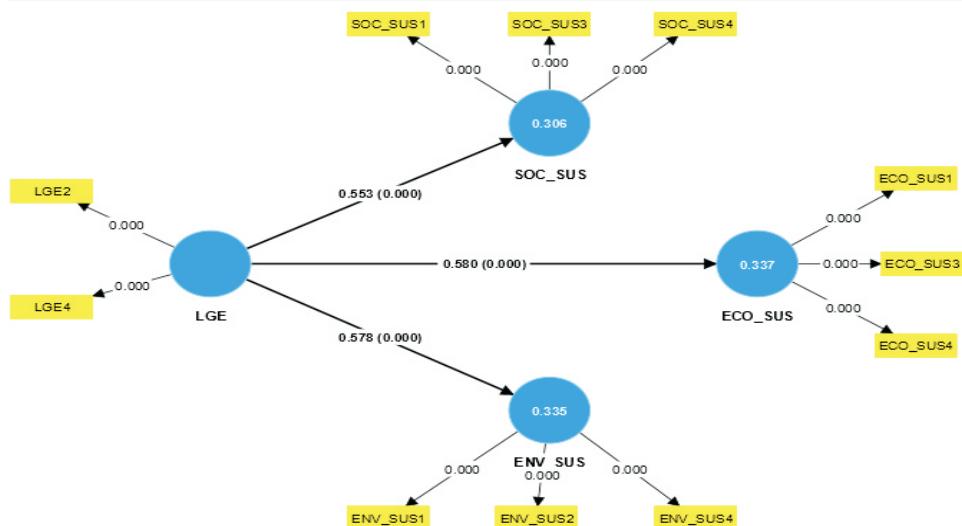
The f-square effect size measure is another name for the R-square change effect. The f-square coefficient can be constructed equal to  $(R^2_{\text{original}} - R^2_{\text{omitted}})/(1-R^2_{\text{original}})$ . The denominator in this equation is “Unexplained”. The f-square equation expresses how large a proportion of unexplained variance is accounted for by  $R^2$  change (Hair et al., 2014). Following Cohen (1988), .02 represents a “small” f<sup>2</sup> effect size, .15 represents a “medium” effect, and .35 represents a “high” effect size.

**Table 3: Structural Fitness Indices**

	Indicators	VIF	R2	F2
Economic Sustainability	ECO_SUS1	1.339	0.337	
	ECO_SUS3	1.143		
	ECO_SUS4	1.24		
Environmental Sustainability	ENV_SUS1	1.205	0.335	
	ENV_SUS2	1.596		
	ENV_SUS4	1.506		
Social sustainability	SOC_SUS1	1.098	0.306	
	SOC_SUS3	1.702		
	SOC_SUS4	1.703		
Local Government Effectiveness	LGE2	1.21		0.508, 0.503 and 0.441
	LGE4	1.21		

Table 5 also presents the VIF diagnostic and estimated PLS weights for the indicators of all the items from the questionnaire. A common rule of thumb is that problematic multicollinearity may exist when the variance inflation factor (VIF) coefficient is higher than 4.0 (some use the more lenient cutoff of 5.0). None of the original indicators had VIF greater than four, and no indicator variable was discarded due to their negative weights.

The overall effect size measure for the structural model, as in regression, indicated that 33.7%, 33.5%, and 30.6% of the variance in the Economic Sustainability, Environmental Sustainability, and Social sustainability are explained by change in Local Government Effectiveness. In the case of  $f^2$ , where Cohen (1988), stated that .02 represents a “small”  $f^2$  effect size, .15 represents a “medium” effect, and .35 represents a “high” effect size. It can be said that Local Government Effectiveness has substantial effect size on Economic Sustainability, Environmental Sustainability, and Social sustainability.

**Figure 1: PLS-SEM structural model with Bootstrapping result**

**Table 4: PLS-SEM Result**

	Coeff	Std Error	T-stat	P values
LGEIA	->			
SOC_SUS	0.580	0.108	5.362	0.000
LGEIA	->			
ECO_SUS	0.578	0.104	5.547	0.000
LGEIA	->			
ENV_SUS	0.553	0.112	4.935	0.000

### 3.5 Hypotheses Testing

Results of path analysis in line with hypothesized relationships were evaluated in Table 4. Findings reveal that:

(H1) the direct relationship that Local government environmental impact assessments and social sustainability generated a 0.580, p-value of 0.000. The relationship indicated a positive one statistically significant. This signifies that there is a significant relationship between Local government environmental impact assessments and social sustainability in Yobe State, Nigeria.

(H2) the hypothesis connecting Local government environmental impact assessments and economic sustainability revealed a  $\beta= 0.578$ , p-value of 0.000, which is strongly significant, suggesting that Local government environmental impact assessments relate positively to economic sustainability.

(H3) the connection between Local government environmental impact assessments and environmental sustainability produced a  $\beta=0.553$ , p-value= 0.000, which is strongly upheld. It implies that Local government environmental impact assessments enhanced environmental sustainability. That is for every 1% increase in Local government environmental impact assessments, environmental sustainability increases by 55.3%.

### 3.6 Discussion of Findings

In this study, hypothesis one revealed that Local government environmental impact assessments no significant impact on social sustainability in Yobe State, Nigeria. The outcome does agree with Johnson & Wong (2024) who found that local government support programs significantly boost entrepreneurial success rates, especially in underserved communities.

In line with the results obtained from the hypothesized relationships, it was discovered that Local Government effectiveness has significant impact on economic sustainability in Yobe State, Nigeria. The result in this study is inconsistent with the findings of Thompson & Garcia (2023). The study findings indicated that strong local governance is associated with faster economic recovery and greater community resilience, highlighting the importance of proactive local policies.

Finally, hypothesis three revealed that, Local Government effectiveness has significant impact on environment sustainability in Yobe State, Nigeria. The outcome does agree with Martin & Johnson (2024), they found that local governments play a critical role in facilitating such initiatives, resulting in reduced waste and increased resource efficiency. Again, it also

agree with the study of Green & Lopez (2023) who found that local governments adopting a holistic approach to SDGs experience improvements in community engagement and resource management.

#### 4.1 Conclusion

This study investigated and analyzed the role of local government in promoting sustainable development practices in Yobe State. The result found that there is a direct relationship between, local government effectiveness and social sustainability, economic sustainability, and environmental sustainability. It is very important to note that the more effective the local governments are, the more there will be Capacity Building, Resource Mobilization, Policy Integration and Policy Coherence and Integration resulting in environmental, social, and economic policies to avoid conflicts and promote synergies. Coordination and collaboration between different government departments and agencies are essential to achieve policy coherence. This study recommends that improving communication between local governments, communities, and NGOs, as well as investing in participatory planning and enforcement mechanisms. Ultimately, effective local governance can create integrated policies that align environmental, social, and economic goals, fostering sustainable development in Yobe State.

#### REFERENCES

Adewumi, O. M., & Akinola, S. O. (2021). Environmental Impact Assessment in Nigeria: Issues and Challenges. *Environmental Science and Pollution Research*, 28(6), 6199-6209.

Barrow, C. J., & Barrow, R. (2016). Environmental Impact Assessment: A Guide to Best Practice. New York, NY: Routledge.

Bourne, L., & Walker, D. H. (2006). Visualizing Stakeholder Influence: A Conceptual Model for Stakeholder Mapping. *International Journal of Project Management*, 24(3), 263-272.

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2013). Creating and Implementing Your Strategic Plan: A Workbook for Public and Nonprofit Organizations. *Jossey-Bass*.

Cohen, E., Gebreeyesus, M., & Cuthbert, A. (2017). The Role of Entrepreneurs in Promoting Sustainable Development: The Case of the Tourism Sector. *Journal of Cleaner Production*, 143, 196-207.

Danielsen, F., Burgess, N. D., & Balmford, A. (2017). A Change of Heart for Protected Areas. *Nature*, 547, 47-49.

Dyllick, T., & Hockerts, K. (2002). Beyond the Business Case for Corporate Sustainability. *Business Strategy and the Environment*, 11(2), 130-141.

García-Morales, V. J., Llorens -Montes, F. J., & Verdu -Jover, A. J. (2018). The Influence of Entrepreneurial Orientation on Innovation and Corporate Performance: The Role of Stakeholder Engagement. *Business Research Quarterly*, 21(1), 1-16.

Glasson, J., Therivel, R., & Chadwick, A. (2012). Introduction to Environmental Impact Assessment. New York, NY: Rout ledge.

Kiwanuka, V., Kansiime, F., & Njuguna, J. (2020). Environmental Impact Assessment Practices and Entrepreneurial Outcomes in Kenya. *Environmental Management*, 65(4), 532-545.

Mavondo, F., Zaman, F., & Wainwright, D. (2019). Investigating the Relationship Between Environmental Impact Assessment and Stakeholder Engagement in South African

SMEs. *Journal of Environmental Planning and Management*, 62(3), 395-411.

Milanova, V. (2021). Sustainable Entrepreneurship: Practice and Theory. *International Journal of Entrepreneurial Behavior & Research*, 27(6), 1413-1430.

Morris, P., & Therivel, R. (2009). *Sustainable Environmental Impact Assessment: Practical Steps*. New York, NY: Routledge.

Nwankwo, I., Ifeanyi, O., & Ajiwe, V. (2019). The Role of Environmental Impact Assessment in Sustainable Development: The Nigerian Perspective. *Sustainable Development*, 27(5), 709-716.

Odo, S. (2016). Enforcement of Environmental Laws in Nigeria: Is the Framework Effective? *Environmental Law Review*, 18(2), 101-119.

Odo, S. I., & Obaji, A. (2017). The Role of Local Government in Environmental Impact Assessment in Nigeria. *Environmental Monitoring and Assessment*, 189(3), 1-10.

Paskin, R., & Shepherd, C. (2021). The Role of Environmental Impact Assessments in Supporting Small and Medium Enterprises: Evidence from Nigeria. *Sustainability*, 13(10), 5611.

Reed, M. S. (2008). Stakeholder Participation for Environmental Management: A Literature Review. *Biological Conservation*, 141(10), 2417-2431.

World Bank. (2020). Nigeria: Yobe State Economic Recovery and Resilience Project. Washington, DC: World Bank Publications.