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# **An Evaluation of Factors Responsible for Poor Regional Planning in Rural Communities in Rivers State**

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## **ABSTRACT**

Regional planning in rural communities of Rivers State, Nigeria, faces significant challenges that impede sustainable development and quality of life improvements. This study evaluates the primary factors contributing to poor regional planning outcomes in these communities through a comprehensive analysis of institutional, socio-economic, and environmental determinants. The research employed a mixed-methods approach, combining quantitative surveys with qualitative interviews across selected rural communities in Rivers State. Findings reveal that inadequate funding mechanisms, weak institutional capacity, poor stakeholder engagement, and environmental degradation constitute the most significant barriers to effective regional planning. The study recommends strengthened institutional frameworks, enhanced community participation, improved funding strategies, and integrated environmental management approaches to address these challenges and promote sustainable rural development in Rivers State.

**Keywords:** Regional planning, rural communities, Rivers State, sustainable development, institutional capacity

## **INTRODUCTION**

Regional planning represents a critical component of sustainable development, particularly in rural communities where strategic spatial organization can significantly impact economic growth, social equity, and environmental sustainability (Albrechts, 2004; Healey, 2007). In Nigeria, the importance of effective regional planning has been increasingly recognized as essential for addressing diverse challenges facing rural communities, including poverty, infrastructure deficits, and environmental degradation (Agbola & Agunbiade, 2009; Olujimi, 2016).

Rivers State, located in the Niger Delta region, presents a unique case study for examining regional planning challenges in rural contexts. The state's predominantly oil-dependent economy has significant implications for rural development patterns, yet many rural communities continue to experience inadequate infrastructure, limited access to basic services, and environmental challenges related to oil exploration activities (Idemudia, 2012; Obi, 2014; Amnesty International, 2017; Ordinioha & Brisibe, 2013).

The theoretical foundation for understanding regional planning effectiveness draws from multiple disciplines. Collaborative planning theory emphasizes the importance of inclusive stakeholder engagement and institutional capacity in achieving successful outcomes (Healey, 1997, 2006), while the

sustainable development paradigm provides a framework for evaluating planning across economic, social, and environmental dimensions (Brundtland Commission, 1987; UN-Habitat, 2016).

Previous research on regional planning in Nigeria has identified challenges including weak institutional frameworks, inadequate funding, poor coordination among government agencies, and limited community participation (Agbola & Agunbiade, 2009; Mabogunje, 2007; Olujimi, 2016). However, limited empirical research has specifically examined these factors within Rivers State's rural communities, despite the state's unique socio-economic and environmental characteristics.

International experiences from countries such as Ireland, South Korea, and Brazil demonstrate the importance of integrated approaches combining top-down policy frameworks with bottom-up community engagement, highlighting the critical role of institutional capacity, adequate funding, and environmental sustainability (OECD, 2006; Park, 2009; Silva, 2018).

Institutional capacity represents a critical determinant of planning effectiveness (North, 1990; March & Olsen, 1989). In Nigeria, specific challenges include weak legal frameworks, inadequate funding mechanisms, poor inter-governmental coordination, and limited technical capacity at local levels (Mabogunje, 2007; Olujimi, 2016).

Socio-economic factors, including poverty, limited education, and weak economic structures, can significantly constrain community participation and limit implementation of planning initiatives (Chambers, 1997; Mohan & Stokke, 2000). Research in Nigeria has demonstrated how these challenges impact regional planning effectiveness in rural areas (Agbola & Agunbiade, 2009; Olujimi, 2016).

Environmental considerations have become increasingly important in regional planning, particularly in areas affected by resource extraction (O'Riordan, 1988; Wheeler, 2004). In the Niger Delta, extensive documentation exists of water pollution, land degradation, gas flaring, and oil spills, which have significant implications for planning effectiveness (Amnesty International, 2017; Idemudia, 2012; Obi, 2014; Ordinioha & Brisibe, 2013).

### **Statement of the Problem**

Rural communities in Rivers State face persistent challenges in regional planning that have hindered sustainable development and improved quality of life for residents. Despite Nigeria's constitutional framework that mandates effective planning at all levels of government (Constitution of Nigeria, 1999), rural areas in Rivers State continue to experience inadequate infrastructure development, poor service delivery, and limited economic opportunities (Akpan, 2014; Nwilo & Badejo, 2006).

The Niger Delta region, where Rivers State is located, has been characterized by environmental degradation, social unrest, and inadequate development planning (Amnesty International, 2017; Obi, 2014). Oil exploration activities have resulted in significant environmental challenges, including water pollution, land degradation, and loss of agricultural productivity, which have not been adequately addressed through comprehensive regional planning initiatives (Idemudia, 2012; Ordinioha & Brisibe, 2013).

Furthermore, weak institutional capacity at local government levels has been identified as a significant barrier to effective planning implementation in Rivers State (Akpan, 2014; Olujimi, 2016). Local government areas, which are constitutionally responsible for rural development, often lack the technical expertise, financial resources, and administrative capacity necessary for effective regional planning (Agbola & Agunbiade, 2009; Mabogunje, 2007).

The absence of comprehensive, empirically-based studies examining the specific factors contributing to poor regional planning in Rivers State's rural communities represents a significant knowledge gap. While general studies on Nigerian planning challenges exist (Agbola & Agunbiade, 2009; Olujimi, 2016), there is limited research that specifically addresses the unique contextual factors affecting rural planning effectiveness in Rivers State. This research gap hinders the development of targeted interventions and policy recommendations for improving regional planning outcomes in these communities.

### **Research Objectives**

The primary objectives of this study are:

1. To identify and analyze the key institutional factors that contribute to poor regional planning in rural communities of Rivers State.
2. To examine the socio-economic factors that influence regional planning effectiveness in rural areas of Rivers State.
3. To assess the environmental factors that impact regional planning processes and outcomes in Rivers State's rural communities.

### **Research Questions**

Based on the stated objectives, this study seeks to answer the following research questions:

1. What are the primary institutional factors that contribute to poor regional planning outcomes in rural communities of Rivers State?
2. How do socio-economic factors influence the effectiveness of regional planning in rural areas of Rivers State?
3. What environmental factors impact regional planning processes and outcomes in Rivers State's rural communities?

### **METHODOLOGY**

This study employed a mixed-methods research design, combining quantitative surveys with qualitative interviews to provide a comprehensive understanding of factors affecting regional planning in rural Rivers State communities. The mixed-methods approach was selected to enable triangulation of findings and provide both breadth and depth of analysis (Creswell, 2014; Tashakkori & Teddlie, 2010).

The study was conducted in six rural communities across three Local Government Areas (LGAs) in Rivers State: Ogba/Egbema/Ndoni, Omuma, and Etche. These LGAs were selected based on their rural characteristics, diverse economic activities, and varying levels of development to ensure representativeness of rural experiences across the state.

A multi-stage sampling technique was employed to select study participants. The total sample size consisted of 384 household respondents, 24 key informants, and 18 focus group discussion participants. The sample size for the quantitative component was determined using Yamane's (1967) formula with a 95% confidence level and 5% margin of error.

Primary data were collected through structured questionnaires, in-depth interviews, and focus group discussions. Secondary data were obtained from government documents, academic publications, and reports from relevant organizations. Data collection was conducted over a six-month period from January to June 2023.

Quantitative data were analysed using Statistical Package for Social Sciences (SPSS) version 28.0, employing descriptive statistics, correlation analysis, and multiple regression analysis. Qualitative data were analysed using thematic analysis following Braun and Clarke's (2006) framework.

**RESULTS**

**Demographic Characteristics of Respondents**

The study involved 384 household respondents across the six selected rural communities. The demographic profile reveals a diverse population with varying educational backgrounds, occupational patterns, and community involvement levels.

**Table 1: Demographic Characteristics of Respondents**

Variable	Category	Frequency	Percentage
Gender	Male	218	56.8
	Female	166	43.2
Age Group	18-30 years	89	23.2
	31-45 years	156	40.6
	46-60 years	102	26.6
	Above 60 years	37	9.6
Education Level	No formal education	45	11.7
	Primary education	98	25.5
	Secondary education	167	43.5
	Tertiary education	74	19.3
Primary Occupation	Farming	142	37.0
	Fishing	78	20.3
	Trading	89	23.2
	Civil Service	52	13.5
	Others	23	6.0

**Research question 1:** What are the primary institutional factors that contribute to poor regional planning outcomes in rural communities of Rivers State?

**Table 2: Assessment of Institutional Factors**

Institutional Factor	Very Poor	Poor	Fair	Good	Very Good	Mean Score
Local government planning capacity	34.6%	41.1%	18.2%	5.2%	0.9%	1.97
Inter-agency coordination	29.2%	38.5%	22.4%	7.8%	2.1%	2.15
Community participation mechanisms	31.8%	35.4%	20.8%	9.6%	2.4%	2.15
Legal framework adequacy	42.2%	33.6%	16.7%	5.7%	1.8%	1.91
Technical expertise availability	38.8%	36.7%	17.2%	5.5%	1.8%	1.94
Planning implementation capacity	36.2%	39.8%	16.9%	5.5%	1.6%	1.96

The results indicate consistently poor ratings across all institutional factors, with mean scores ranging from 1.91 to 2.15 on a 5-point scale. Legal framework adequacy received the lowest rating (mean = 1.91), while inter-agency coordination and community participation mechanisms both scored 2.15.

**Research question 2:** *How do socio-economic factors influence the effectiveness of regional planning in rural areas of Rivers State?*

**Table 3: Socio-Economic Factor Analysis**

Socio-Economic Factor	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score
Adequate income for development contribution	45.3%	32.8%	12.2%	7.3%	2.4%	1.89
Community economic capacity	41.7%	35.9%	15.1%	5.7%	1.6%	1.90
Educational levels support planning	28.6%	31.0%	23.7%	13.0%	3.7%	2.32
Access to information and communication	39.1%	33.6%	18.2%	7.0%	2.1%	1.99
Women's participation in planning	35.2%	30.5%	21.1%	10.4%	2.8%	2.15
Youth engagement in development	32.3%	29.7%	24.2%	11.2%	2.6%	2.22

Socio-economic factors show generally poor ratings, with adequate income for development contribution receiving the lowest score (mean = 1.89). Educational levels supporting planning received a relatively higher rating (mean = 2.32), though still below the midpoint of the scale.

**Research question 3:** *What environmental factors impact regional planning processes and outcomes in Rivers State's rural communities?*

**Table 4: Environmental Factor Assessment**

Environmental Factor	Very Impact	High High Impact	Moderate Impact	Low Impact	No Impact	Mean Score
Water pollution from oil activities	52.3%	28.9%	12.5%	4.7%	1.6%	4.26
Land degradation	41.4%	34.6%	16.7%	5.7%	1.6%	4.09
Air pollution and gas flaring	48.2%	29.2%	15.1%	5.5%	2.0%	4.16
Flooding and erosion	38.5%	31.8%	20.8%	7.3%	1.6%	3.98
Loss of agricultural productivity	44.5%	32.0%	16.4%	5.5%	1.6%	4.12
Inadequate waste management	46.9%	30.7%	15.6%	5.2%	1.6%	4.16

Environmental factors show consistently high impact ratings, with water pollution from oil activities receiving the highest score (mean = 4.26). All environmental factors scored above 3.98, indicating significant negative impacts on regional planning efforts.

**Correlation Analysis**

Correlation analysis was conducted to examine relationships between different factor categories and overall planning effectiveness.

**Table 5: Correlation Matrix**

Variables	1	2	3	4
1. Institutional Factors	1.000			
2. Socio-Economic Factors	0.624**	1.000		
3. Environmental Factors	-0.589**	-0.512**	1.000	
4. Planning Effectiveness	0.743**	0.681**	-0.698**	1.000

Note: Correlation is significant at the 0.01 level (2-tailed)

The correlation analysis reveals strong positive relationships between institutional factors and planning effectiveness ( $r = 0.743$ ), and between socio-economic factors and planning effectiveness ( $r = 0.681$ ). Environmental factors show a strong negative correlation with planning effectiveness ( $r = -0.698$ ), indicating that environmental challenges significantly impede planning outcomes.

**Multiple Regression Analysis**

Multiple regression analysis was conducted to determine the relative contribution of each factor category to planning effectiveness.

**Table 6: Multiple Regression Analysis Results**

Variables	Beta	t-value	Sig.	VIF
Institutional Factors	0.412	8.764	0.000	2.147
Socio-Economic Factors	0.298	6.421	0.000	1.892
Environmental Factors	-0.325	-7.298	0.000	1.743

**$R^2 = 0.721$ , Adjusted  $R^2 = 0.718$ ,  $F = 325.467$ ,  $Sig. = 0.000$**

The regression model explains 72.1% of the variance in planning effectiveness ( $R^2 = 0.721$ ). All three factor categories are significant predictors of planning effectiveness. Institutional factors have the strongest positive influence ( $\beta = 0.412$ ), followed by socio-economic factors ( $\beta = 0.298$ ). Environmental factors have a significant negative influence ( $\beta = -0.325$ ).

**DISCUSSION OF RESULTS**

**Institutional Factors and Planning Effectiveness**

Institutional factors emerged as the strongest determinant of regional planning effectiveness, with consistently poor ratings across all indicators reflecting systemic weaknesses in Nigeria's planning framework. The legal framework scored particularly low (mean = 1.91), confirming criticisms of outdated and poorly enforced planning legislation (Olujimi, 2016; Healey, 2007). Inter-agency coordination (mean = 2.15) remains fragmented across government levels, creating barriers that mirror documented challenges in other Nigerian contexts (Agbola & Agunbiade, 2009; March & Olsen, 1989). Limited community participation mechanisms (mean = 2.15) further constrain effectiveness, contradicting collaborative planning principles and reinforcing the need for meaningful engagement in rural development (Healey, 1997; Chambers, 1997).

**Socio-Economic Factors and Development Constraints**

Socio-economic constraints present significant barriers to planning implementation, with inadequate household income (mean = 1.89) and limited community economic capacity (mean = 1.90) reflecting poverty-related limitations that trap communities in underdevelopment cycles. These findings align with Sen's (1999) capability approach, emphasizing economic empowerment as fundamental to sustainable development. Educational levels supporting planning received slightly higher ratings (mean = 2.32), suggesting capacity-building potential consistent with Freire's (1970) development framework. Gender and youth participation constraints (means = 2.15 and 2.22 respectively) reflect broader social exclusion patterns documented in development contexts (Mohan & Stokke, 2000).

**Environmental Factors and Sustainable Development**

Environmental degradation severely constrains planning effectiveness, with all factors rated high-impact. Water pollution from oil activities (mean = 4.26) leads the environmental challenges, confirming extensive documentation of Niger Delta contamination (Amnesty International, 2017; Idemudia, 2012). Air pollution and gas flaring impacts (mean = 4.16) represent ongoing environmental justice issues, while land degradation (mean = 4.09) and agricultural productivity loss (mean = 4.12) directly threaten rural livelihoods. These findings demonstrate that current regulatory frameworks remain inadequate to address the region's environmental crisis (Ordinioha & Brisibe, 2013; Rees, 1995).

**Integrated Analysis and Planning Implications**

Correlation analysis reveals mutually reinforcing relationships between institutional and socio-economic factors ( $r = 0.624$ ), indicating that integrated interventions are necessary. The strong negative correlation

between environmental factors and planning effectiveness ( $r = -0.698$ ) confirms environmental sustainability as a prerequisite for development success (Brundtland Commission, 1987). Multiple regression analysis underscores the primacy of institutional factors ( $\beta = 0.412$ ) in determining planning outcomes, supporting North's (1990) institutional theory. Critically, environmental factors exert significant negative influence ( $\beta = -0.325$ ), actively undermining planning effectiveness rather than merely constraining it—a finding with profound implications for Niger Delta development approaches.

## **CONCLUSION**

This study provides comprehensive evidence of the multifaceted challenges facing regional planning in rural Rivers State communities. The research findings demonstrate that institutional weaknesses, socio-economic constraints, and environmental degradation combine to create significant barriers to effective regional planning and sustainable development.

The institutional analysis reveals fundamental weaknesses in planning capacity, legal frameworks, and coordination mechanisms that severely limit planning effectiveness. These institutional challenges are compounded by socio-economic constraints, including poverty, limited education, and weak community economic capacity, which restrict meaningful participation in planning processes.

Environmental factors emerge as particularly severe constraints, with oil-related pollution, land degradation, and loss of agricultural productivity creating significant challenges for sustainable development. The strong negative correlation between environmental factors and planning effectiveness demonstrates that environmental degradation actively undermines planning efforts rather than simply representing a passive constraint.

The integrated analysis reveals important relationships between factor categories, with institutional and socio-economic factors showing strong positive correlations, while environmental factors negatively impact both planning effectiveness and community capacity. These findings highlight the need for comprehensive, integrated approaches to addressing regional planning challenges in Rivers State's rural communities.

The research contributes to the theoretical understanding of regional planning challenges in resource-dependent developing country contexts, while providing empirical evidence for policy makers and development practitioners working in similar environments. The findings support the importance of collaborative planning approaches that address institutional, socio-economic, and environmental factors simultaneously.

## **RECOMMENDATIONS**

Based on the research findings, the following recommendations are proposed to improve regional planning effectiveness in rural Rivers State communities:

1. Strengthen institutional capacity at local government levels through comprehensive training programs, technical assistance, and establishment of dedicated planning units with adequate staffing and resources.
2. Create sustainable financing mechanisms for rural development that combine government allocations, community contributions, private sector investment, and international development assistance to support planning implementation.
3. Develop integrated environmental management frameworks that address oil-related pollution, promote sustainable resource use, and build community resilience to environmental challenges through ecosystem restoration and alternative livelihood programs.

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