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ASSESSING THE IMPACT OF URBANIZATION ON SELECTED SUBURBAN COMMUNITIES IN OGOJA LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA

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Abstract

This study assesses the impact of urbanization in some selected rural communities undergoing peri-urbanization in Ogoja Local Area of Cross River State, Nigeria. It was meant to assess the effects of urbanization on livelihoods, access to social services, land use, incomes and land rent value changes in the study area. Five villages were selected out of the 24 villages located within Ogoja Urban Shadow using simple random sampling. A total of 256 questionnaires were administered to residents of the five selected villages using a systematic random sampling technique. Key informant interviews and physical observations were also used as data collection tools. The result shows that urbanization has presented constraints and opportunities to the rural communities adjoining Ogoja Urban. Peri-urbanism has led to agricultural land use giving way to non-farmland uses, with a population reduction engaged in agriculture. As arable land reduces, agriculture as a source of livelihood has diminished. While agriculture has declined and is in the process of being modified, new livelihood types have evolved. Overall, peri-urbanism has been a blessing, affecting livelihoods, incomes, land rent values and access to social services positively. The study recommends a speedy implementation of the urban policy in the area. Promoting vertical development to protect prime agricultural lands and avert dangers of food insecurity is the way forward. To succeed, however, peri-urban dwellers, urban developers and planners, city authorities, traditional rulers and all stakeholders must be involved.

Keywords: Urbanization, peri-urbanization, suburban communities and Ogoja region

1. Introduction

Urbanization is one of the most significant trends shaping the global population landscape, with more than half of the world's population now residing in urban areas (Thomas 2008; Olujimi 2009; Satterthwaite et al. 2010). The relationship between urbanization and development has been explored through various theoretical lenses. For example, modernization theory links urbanization to industrial capitalism's expansion, while Growth Pole theory, emerging in the 1960s and 1970s, highlighted cities as hubs of economic development that would extend benefits to surrounding rural areas (Gantsho 2008). Studies, such as those by Njoh (2003) and Obeng-Odoom (2010),

have shown that urbanization correlates positively with economic development, particularly when measured in terms of the Human Development Index (HDI).

However, despite the potential benefits of urban growth, Africa's rapid urbanization has often been accompanied by significant challenges, including unplanned urban sprawl and deteriorating living conditions (Chirisa 2010; Olujimi 2009). In sub-Saharan Africa, urbanization has occurred without the industrial expansion that typically accompanies urban growth in other regions, leading to concerns that urbanization in Africa may be an extractive process that undermines rural development rather than

promoting it (Songsore 2003; Keiser et al. 2004). Nigeria, where approximately 53.9 per cent of the population now lives in urban areas (Worldometers 2023), exemplifies this pattern of rapid, unplanned urban expansion. As cities grow, the peri-urban areas—zones at the fringes of urban centres—experience dynamic changes, including shifts in land use, social structures, and economic activities.

In the context of Ogoja Local Government Area (LGA) in Cross River State, Nigeria, urbanization has led to significant transformations in peri-urban and suburban communities. Ogoja's population has grown rapidly, driven by its strategic location, fertile land, and role as a commercial hub. This growth has had profound implications for the surrounding villages, such as Agiga, Adagum, Odaje, Ndok, Aburumbede, Ukpogada, Abakpa, and Ishibori, which are

now home to an increasing number of urban dwellers commuting to the city for work. As the urban area expands, these peri-urban villages experience changes in livelihoods, land use, social cohesion, and economic conditions.

This study seeks to assess the effects of urbanization on selected villages in Ogoja LGA, with a particular focus on how urban expansion influences livelihood changes, access to social services, land use patterns, and income levels in these peri-urban communities. Specifically, the research explores the impact of urbanization on agricultural activities, non-farm income generation, and land rent values, all of which are critical to understanding the socioeconomic dynamics of these transitioning areas.

2. Methodology

2.1 Study Area

Ogoja Local Government Area in Cross River State is as historic as Nigeria itself. Its headquarters is located in Ogoja town (Igoli), situated in the northeast of the state. The area lies between latitudes 6°30' N and 6°50' N, and longitudes 80°40' E and 80°40' E. It is bordered to the south by Ikom and Boki Local Government Areas, to the east by Obudu Local Government Area, to the north by Bekwarra and Yala Local Government Areas, and to the west by Yala Local Government Area. Ogoja town is approximately 311 km from Calabar, the state capital; 91 km from Ikom; 53 km from Obudu; and 109 km from Abakaliki.

Ogoja town originated as a small agrarian settlement inhabited by various ethnic groups, including the Nkim Nkum, Ishibori, Mbube, Bakor, Yala, Ukelle, and Obudu

peoples. The town developed around a weekly market, which served as a vital hub for trade and cultural exchange in the region. In the early 20th century, Ogoja came under British colonial administration, with colonial authorities establishing an administrative and commercial presence in the area. In 1912, the colonial government designated Ogoja as the headquarters of Ogoja Province, leading to the development of administrative and infrastructure facilities, including the construction of roads and public buildings, which spurred the town's growth. Following Nigeria's independence in 1960, Ogoja continued to evolve as a regional administrative and commercial center. The creation of Cross River State in 1967, which included Ogoja as one of its local government areas, further solidified the town's importance. Significant population growth occurred in the 1970s and 1980s as Ogoja attracted migrants from surrounding rural areas seeking economic opportunities. In the

late 20th and early 21st centuries, Ogoja has experienced rapid and largely unplanned urban expansion, characterized by the development of new residential areas, commercial districts, and public facilities.

This growth has been driven by ongoing population influx and the town's role as a hub for regional trade, agriculture, education and public administration.

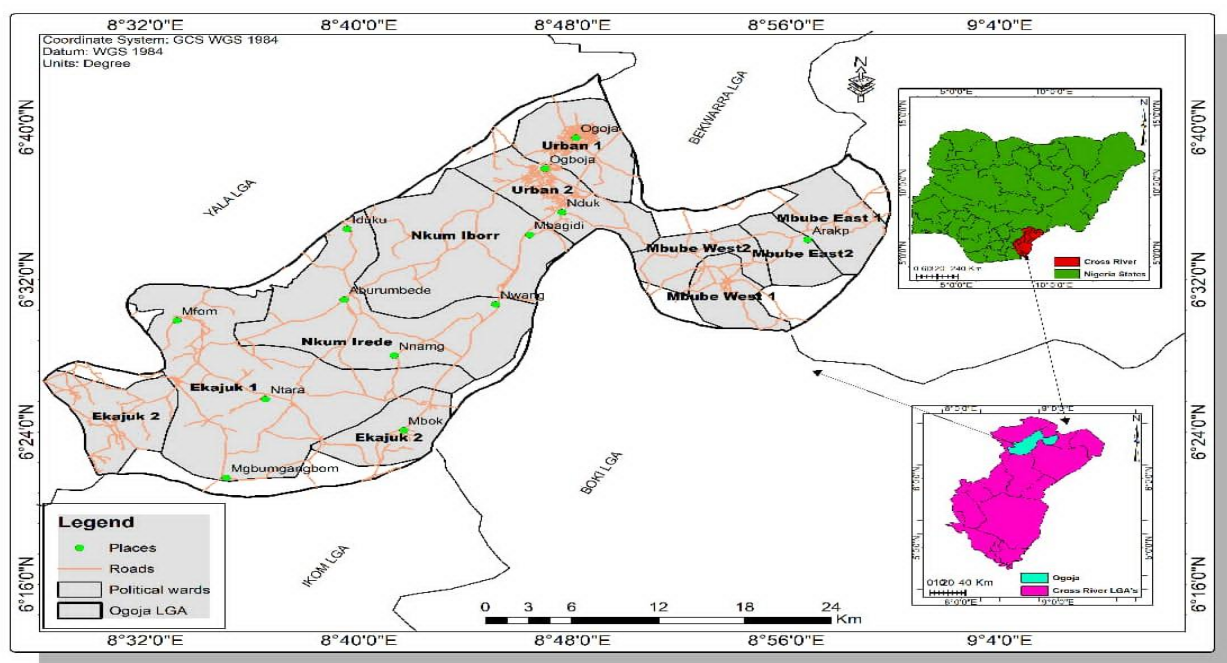


FIG 1: Ogoja Local Government Areas, Cross River State, Nigeria.

Source: GIS Unit, Dept of Geography, University of Calabar, Calabar (2024).

3. Methods

This study employed a survey research design to explore the effects of urbanization on selected peri-urban villages around Ogoja Urban. The research gathered data from both primary and secondary sources to examine how urban expansion impacts key aspects of village life, including livelihoods, access to social services, land use patterns, and income levels.

The data needed for the study included information on occupational and livelihood changes, accessibility to social services, shifts in land use, variations in farm and non-farm incomes, and changes in land rent values in the villages affected by

urbanization. To collect this information, both primary and secondary data sources were used. Primary data came directly from residents of the selected villages—Ndok, Odaje, Abakpa, Ishibori, and Agiga—as well as from key informants such as local chiefs, teachers, trade association leaders, estate valuers, and planning officials. Secondary data, on the other hand, were sourced from academic journals, government reports, textbooks, internet resources, and other official documents, which provided additional context and background information.

The sample size for this research was determined based on the availability of

respondents in each village. A total of 256 questionnaires were distributed across the five selected villages. Ndok received 53 questionnaires, Odaje 54, Abakpa 60, Ishibori 50, and Agiga 39, making up the total sample size. (Table1)

To select participants for the study, the research team employed a combination of sampling techniques. Simple random sampling was used to choose five villages from a larger pool of 24 peri-urban communities under the influence of Ogoja Urban. The selected villages were all located within a 20 km radius of the urban center, ensuring they were within the area impacted by urbanization. Systematic random sampling was then applied to select individual households within these villages. Questionnaires were administered at regular intervals—every 3rd, 4th, or 5th house—depending on the arrangement of homes along the main roads or footpaths. This method worked particularly well in the linear settlement patterns typical of rural areas. Finally, purposive sampling was used to select key informants, including village chiefs, teachers, planning officials, and estate valuers, who had specialized knowledge relevant to the study's focus.

The primary method of data collection was a structured questionnaire, designed with both closed and open-ended questions. The questionnaire was divided into two sections: one focused on the socio-economic characteristics of the respondents, and the other on the impacts of urbanization in the selected villages. A total of 256 questionnaires were successfully administered and retrieved. In addition to the questionnaire, interviews were conducted with key informants, such as local leaders and experts, to gather deeper insights. The research team also conducted physical

observations of urbanization-related features in the villages, such as changes in land use, the introduction of new livelihood systems, the presence of social amenities, and patterns of rural-urban commuting.

The data collection process began with a reconnaissance survey conducted in December 2023. This initial visit to the study area allowed the research team to familiarize themselves with the physical and social environment, including the locations of Ogoja Urban and the surrounding peri-urban villages. The reconnaissance survey was instrumental in planning the sampling methods, determining the sample size, and finalizing the data collection strategies. During this phase, local field assistants were recruited and trained to help administer the questionnaires and manage relationships with the local population. Each village provided two field assistants with at least secondary education, who were then trained in questionnaire administration. In February 2024, data collection began, following a logistics meeting in Ogoja Urban, where the field assistants were further briefed, distributed questionnaires, and deployed to their respective villages.

Once the data were collected, simple descriptive statistics were used for analysis. The results were processed and presented using tables, frequency distributions, percentages, and charts, which made it easy to interpret the data. These methods were effective in summarizing the findings and visualizing key patterns, such as changes in occupation, land use, income levels, and the availability of social services in the peri-urban areas around Ogoja Urban. Through this methodological approach, the study provided a comprehensive analysis of the effects of urbanization on these rapidly changing rural communities.

S/N	Village	No. of Questionnaires Administered	% of Total
1	Ndok	53	21
2	Odaje	54	21
3	Abakpa	60	23
4	Ishibori	50	20
5	Agiga	39	15
Total		256	100

Table 1: Sample Size Distribution

4. Results

4.1 Socio-Economic Characteristics of Respondents.

Table 4.12 presents the socio-economic characteristics of respondents in the study area. The data indicate that the majority of respondents are male, comprising 60% of the sample, while females account for 40%. Notably, 64% of respondents fall within the age bracket of 35 to 64 years. Regarding education, 59% are secondary school graduates. The occupational distribution

reveals that 25% are engaged in trading/business, 29% work in civil service, 27% are students, and 19% are contractors. Additionally, 68% of respondents earn less than 450,000 naira per annum. In terms of ethnicity, Indigenous tribes from Ogoja makeup 48% of the respondents, while other groups include the Efiks/Ibibio (11%), Ibo (20%), Yorubas (8%), and Hausa/Fulanis (13%).

Table 2: Socio-Economic Characteristics of Respondents

Socio-economic characteristics	Number of respondents	Percentage
Gender		
Male	152	60
Female	104	40
Age		
15-34	67	26
35-64	164	64
Over 64	25	10
Educational attainment		
Informal	30	12
Primary	50	19
Secondary	151	59
Tertiary	25	10
Occupation		
Traders/business	64	25
Civil service	73	29
Students	68	27

Contractors	51	19
Income per annum (#)		
Less than 50000	20	8
151000-250000	12	5
251000-350000	40	15
351000-450000	102	40
Over 450000	82	32
Ethnicity		
Ogoja	124	48
Ibibio	28	11
Ibos	51	20
Yoruba	20	8
Hausa/Fulanis	33	13
Total	256	100

Source: Author's fieldwork,2024

4.2 Effects of urbanization on Livelihood Changes

Table 3 illustrates the traditional livelihood systems that are currently being altered or modified due to the influence of urbanization in the area. These livelihood systems include farming, fruit gathering, hunting, wood carving, lumbering, and trading.

Table 3: Old livelihood system in selected villages under urban shadow in Ogoja LGA

S/n	Old livelihoods	Number of respondents	Total	percentage	Total
1	Farming	251	256	98.0	100
2	Fruit gathering	161	256	62.8	100
3	Hunting	98	256	38.2	100
4	Fishing	68	256	26.5	100
5	Wood carving	77	256	30.0	100
6	Lumbering	64	256	25.0	100
7	Trading	84	256	32.8	100

Source: Author's fieldwork,2024

Table 4 presents the new livelihood systems that have emerged in villages undergoing peri-urbanization in Ogoja LGA. It details the various livelihoods identified across the five investigated villages. The data indicate that peri-urbanization in Ogoja LGA has

significantly influenced job creation in neighboring villages. The new livelihood systems include businesses (trading), artisan work, service provision, vegetable farming, construction, manufacturing, transportation, and palm wine tapping

Table 4 New livelihoods in some selected villages under urban influence in Ogoja LGA

S/n	New livelihoods	Number of respondents	percentage
1	Trading/business	25	9.7
2	Artisan	17	6.6
3	Provision of services	14	5.5
4	Vegetable farming	16	6.3
5	Construction	9	3.5
6	Trading/artisan	11	4.3
7	Livestock farming	15	5.9
8	Manufacturing	13	5.1
9	Transportation	24	9.4
10	Palm wine tapping	8	3.1
11	All of the above	104	40.6

Source: Author's fieldwork,2024

4.3 Effects of Urbanization on Access to Social Services

Table 5 illustrates the effects of urbanization on access to social services in rural areas. The data reveal that a significant percentage of respondents (25%) acknowledged that peri-

urbanization in the rural areas of Ogoja LGA has improved access to essential social services, including access roads, education, water supply, electricity, communication facilities, recreation, market access, and sanitation services.

Table 5: Effects of Ogoja Urban growth on access to social services of selected villages under urban shadow.

Effects	Villages						
	Ndok	Odaje	Abakpa	Ishibori	Agiga	Total	%
Access to road	8	9	10	8	6	41	16
Access to health service	4	5	6	6	4	25	10
Access to education	5	6	5	6	3	25	10
Access to water supply	2	3	5	5	4	19	8
Access to electricity	6	4	8	5	6	29	11
Access to communication	3	4	2	3	2	14	5
Access to recreation facilities	3	1	1	0	2	7	3
Market for goods and services	6	8	7	6	2	29	11
Access to sanitation services	1	0	0	1	1	3	1
All of the above	15	14	16	10	9	64	25.
Total	53	54	60	50	39	256	100

Source: Author's fieldwork,2024

4.4 Effects of Urbanization on Land Use Change in selected villages

Table 6 presents respondents' opinions on land use changes in areas affected by urban

encroachment in Ogoja LGA. Participants were asked to identify the type of land use that is declining in size. The data indicates that 56.6% of respondents identified

farmland as the primary land use type experiencing the greatest reduction. This is followed by water bodies (21%), vegetation (17.2%), and urban land (4.3%).

Table 6: Land use type declining in size due to urbanization in Ogoja LGA.

Land use type declining in size	Number of respondents	percentage
Farmland	145	56.6
Urbanland	11	4.3
Water	56	21.9
Vegetation	44	17.2
Total	256	100

Source: Author's fieldwork,2024

4.5 Effects of Urbanization on Agricultural and Non-Agricultural Incomes

Table 7 provides insights into the effects of urbanization on income derived from various sources. The data indicates a significant shift in the income of residents in selected villages

due to the peri-urbanization of Ogoja LGA. Historically, farming was the primary source of income for 77% of the population; however, it has now been supplanted by non-farming income sources, which account for 59%.

Table 7: Previous and current sources of income in selected villages under peri-urbanisation

Livelihood	Previous		Current	
	Number of respondents	Percentage	Number of respondents	Percentage
Farming	196	77	104	41
Non-farming	60	23	152	59
Total	256	100	256	100

Source: Author's fieldwork,2024

FIG. 2 illustrates respondents' assessments of income changes resulting from the peri-urbanization of Ogoja villages. According to the data, 47% of respondents reported that their income is increasing, while 34% indicated a decrease, and 19% felt their

income has remained unchanged. This suggests that the urbanization of rural Ogoja has been beneficial, contributing to improvements in income levels for many residents.

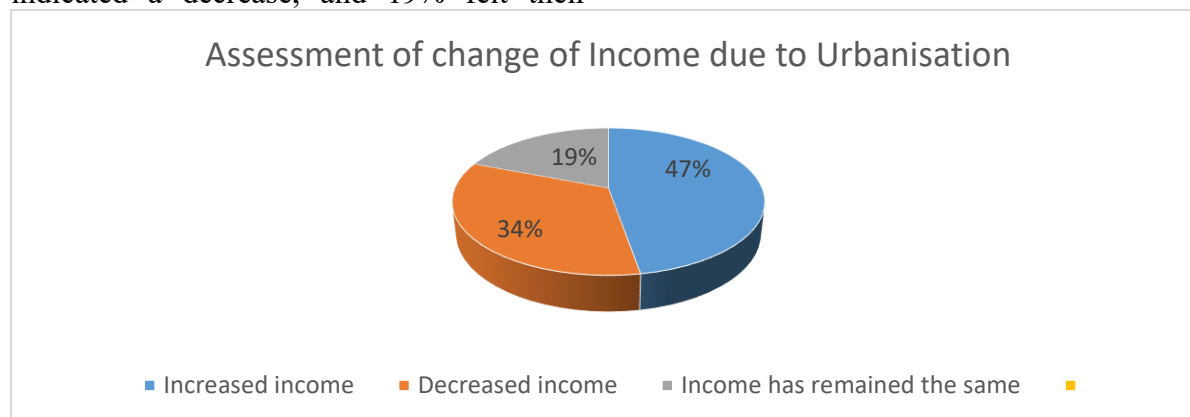


FIG. 2: Assessment of change of income due to peri-urbanisation in Ogoja LGA.

Source: Author's fieldwork,2024

4.6 Effects of Urbanization on Land Rent Values.

Table 8 presents respondents' assessments of the trend in land rent values in the study area. The data reveals that 77% (196) of respondents confirmed that land rent values

have been increasing, while 7% reported a decrease, and 16% indicated that the values have remained unchanged. This indicates that peri-urbanization has contributed to a rise in land rent values.

Table 8: Assessment of land rent values change due to peri-urbanization in Ogoja LGA

Assessment	Number of respondents	Percentage
Land rent value has increased	196	77
Land rent value has decreased	17	7
Land rent value has remained the same	43	16
Total	256	100

Source: Author's fieldwork,2024

Table 10 illustrates the rent values of a plot of land in selected villages and Ogoja Urban proper for the years 2015 and 2024. The data indicates that, on average, a plot of land was valued at #700,000 in a peri-urban village

and #1,000,000 in Ogoja Urban in 2015. As of 2024, these values have increased significantly, with plots selling for #3,000,000 in peri-urban villages and #6,000,000 in Ogoja Urban.

Table 9: Land rent values per plot of land in some selected villages under Ogoja Urban shadow

Village	Land rent values in Naira	
	Previous (2015)	Current (2024)
Ndok	600,000	2,500,000
Odaje	500,000	1,500,000
Abakpa	700,000	3,000,000
Ishibori	800,000	4,000,000
Agiga	900,000	4,000,000
Average	700,000	3,000,000
Ogoja urban	1,000,000	6,000,000

Source: Author's fieldwork,2024

4.7 Negative Effects of Urbanization on Villages under Peri-Urbanization in Ogoja LGA

Table 10 reveals the most prevalent negative effects of urbanization on villages adjacent to Ogoja Urban. Most respondents (48%) indicated that the primary drawback of

urbanization in these neighboring villages is the usurpation of farmlands for non-farming activities. Additional concerns identified include the loss of traditional value systems, class formation, insecurity, poverty, inequalities, and the displacement of the indigenous population in the area.

Table 10: Common Negative Effects of Urbanization in Ogoja LGA

Effects	Number of respondents	Percentage
Conversion of farmlands to non-farmland	54	21
Erosion of traditional values	20	8
Social stratification	16	6
Insecurity challenges	17	7
Poverty and inequality	10	4
Displacement of local tribes	15	6
All the above	124	48
Total	256	100

Source: Author's fieldwork,2024

4.8 Discussion of Findings

This study on the effects of urbanization in selected villages within Ogoja Local Government Area has provided valuable insights into the relationship between urbanization and the socio-economic conditions of rural areas under urban influence. The findings indicate that villages in the urban shadow of Ogoja have experienced significant changes in occupation and livelihood systems. Traditional livelihoods such as farming, fishing, hunting, fruit gathering, lumbering, and wood carving are increasingly being replaced by non-farming, urban-influenced economic activities. The emerging urban livelihood activities in the peri-urban villages of Ogoja LGA include trading, artisan work, manufacturing, service provision, transportation, tourism, businesses, vegetable farming, and construction. Scholars have documented similar shifts in occupation and livelihood diversification in various parts of the world (Tacoli, 2006; Oduro et al., 2014; Ellis, 2000; Rigg, 2006; and Owusu, 2007). This transition in occupations and livelihood diversification has been attributed to several factors, including the conversion of farmland to non-farming uses, the growth of informal settlements, insecure land tenure, limited access to social services, and exposure to

environmental hazards (UN-Habitat, 2008; Adell, 1999; and Simon et al., 2006).

The findings indicate that urbanization has improved access to social services and facilities for residents in peri-urban areas. This improvement allows residents to easily access essential services such as roads, hospitals, electricity, water supply, communication facilities, recreation, markets, and skill acquisition programs. However, key informants noted that a significant challenge remains: the disparity in wealth distribution among inhabitants. This inequality creates barriers to the accessibility and affordability of social services. Additional factors contributing to these challenges include transportation issues, legal status, and cultural barriers. Similar challenges have been documented in other regions worldwide by researchers (UN-Habitat, 2016; Adell, 1999; Tacoli, 2006; Farrington and Farrington, 2005; and Porter, 2002). Peri-urbanization has significantly altered land use patterns in the villages surrounding Ogoja Urban. Our findings indicate that agricultural land use has notably declined, along with reductions in water and vegetation cover. This loss of farmland is primarily attributed to the encroachment of urban non-farming activities into rural agricultural areas, resulting in the loss of

productive farmland and posing a threat to food security.

Additionally, this encroachment leads to the fragmentation of natural habitats, disruption of ecological services, and the creation of unplanned and underserved settlements. This concerning trend is influenced by factors such as land tenure systems, economic development, and policy frameworks. Research conducted in various regions worldwide supports this pattern of land use change. Studies by Deng et al. (2009), Munroe et al. (2009), Fazal (2000), Jang et al. (2013), Antrop (2004), and Alberti (2005) confirm the decline of rural farmlands due to peri-urbanization. Urbanization has been found to significantly influence the incomes of both farm and non-farm residents. Data analysis indicates that the primary source of income for village residents has shifted from farming in the past to non-farm activities in the present. Furthermore, the assessment of income patterns reveals a general increase in incomes within the peri-urban villages of Ogoja LGA.

While farm incomes are declining, non-farm incomes are on the rise. Several studies by urban scholars corroborate this trend. Qui et al. (2012) and Fazal (2000) noted a decline in farm incomes, while Munroe et al. (2005) and Primdahl (1999) observed a reduction in farm

profitability due to rising land costs. The increase in income among peri-urban communities has been attributed to the diversification of agricultural production to meet the demands of the urban population (Lerner & Fakin, 2011; Narain & Nischal, 2007). Urbanization has been found to significantly impact land rent values in the peri-urban communities of Ogoja. Data analysis indicates a general increase in land rent values in the selected villages, with rent values decreasing as the distance from Ogoja Urban increases. Research by Lichtenberg and Ding (2008) and Liu et al. (2016) supports the observation that urban expansion leads to rising land values and changes in land use. Factors contributing to the increase in land rent values include improved accessibility due to infrastructure development (Kombe, 2005), speculative investment (Xu et al., 2017), and the socio-economic status of residents (Falla et al., 2011). Literature also highlights the uneven distribution of land rent values, influenced by proximity to urban areas and the availability of infrastructure and public facilities (Meulder, 2012). This uneven distribution can marginalize groups such as low-income residents and small-scale farmers, who may be priced out of the local land market and compelled to relocate (Kuruneri-Chitepo & Shackleton, 2011).

4.9 Conclusion

This research aims to illuminate the effects of urbanization on suburb or peri-urban communities in the Ogoja Local Government Area of Cross River State. It offers a comprehensive understanding of the social, economic, and environmental changes

Recommendation

Based on the findings of these study, the following recommendations are made;

1. Alternative means of livelihood should be provided in these

occurring in these areas. By addressing the identified research problem, this study seeks to contribute to sustainable urban development practices and facilitate the formulation of policies that prioritize the well-being and resilience of peri-urban villages and communities.

communities to ensure proper integration of peri-urban dwellers into urban monetary economy. This can be done through the diversification of the peri-urban

economy and the development of the non-farm income generating activities. Peri-urban agriculture should also be encouraged in the form of intensive agriculture to ensure sustained urban and peri-urban food supply. Avenues for skills training and development could be created. Access to credit should be expanded to cover the peri-urban poor

2. Provision of more social amenities to peri-urban villages and elimination of disparities in access to these amenities.
3. Speedy implementation of the urban policy land use planning in the area

that promote vertical development to protect prime agricultural lands and avert dangers of food insecurity.

4. Multiple cash-income job opportunities such as trading, construction work, manufacturing among others as alternative means of livelihood should be created to ensure steady income for all classes of people in the area.
5. Land rent prices control mechanism should be put in place to ensure stability in prices.

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