

## Population Change, Urbanization, and Sustainable Development in Ugep Community, 2015-2030

ETENG, Etim Omini, PhD<sup>1</sup>, Moses Kishaleunim Moses<sup>2</sup>, Okang, Akim O.<sup>3</sup>, Amah, Joseph Etim<sup>4</sup>, Babatunde Tolulope<sup>5</sup> & Ibol, Philip Mopnang<sup>6</sup>

<sup>1,2,3&4</sup>Department of Geography and Environmental Sciences, University of Calabar, Cross River State, Nigeria. <sup>5</sup>Earthpro Limited, Nigeria. & <sup>6</sup>Sir Philip Ibol Foundation, Nigeria

**Email :** etimeteng89@gmail.com<sup>1</sup>, kishaleunimmoses@gmail.com<sup>2</sup>, okangakim@gmail.com<sup>3</sup>, josephamah2024@gmail<sup>4</sup>, babatundetolulope@gmail.com<sup>5</sup>, & philibol@yahoo.com<sup>6</sup>

**ORCID ID:** <https://orcid.org/0000-0001-8461-8761><sup>1</sup>, <https://orcid.org/0009-0004-6150-0647><sup>2</sup>, <https://orcid.org/0009-0003-1525-2497><sup>4</sup> & <https://orcid.org/0009-0003-3600-9966><sup>6</sup>

### Abstract

*The paper discusses the complex interactions among rapid population growth, urbanization, and Sustainable Development Goals (SDGs) in Ugep Urban, Cross River State, Nigeria, for the period 2015-2030. This qualitative survey draws on existing academic literature, government reports, and statistical data to study how demographic pressures are manifested through significant socio-economic and environmental challenges. The problem of this research centers on the widening gulf between rapid urbanization and the provision of essential infrastructure and services. Key findings from this study show high incidence of poverty, stunted housing systems, poor sanitation facilities, and degradation of pristine natural habitats as characteristics of urbanization in Ugep. These conditions impede progress towards critical SDGs such as Goal 1 (No Poverty), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), and Goal 11 (Sustainable Cities and Communities). The study concludes that without a paradigm shift toward integrated, sustainable, and inclusive urban planning, Ugep's development trajectory will remain at odds with the 2030 SDGs Agenda. Recommendations are made to urgently implement a comprehensive urban development plan, significant investment in social and physical infrastructure, and in strengthening local governance and enforcement, encouraging community-driven initiative for resilience enhancement and promotion of sustainable livelihoods.*

**Keywords:** Population Change, Urbanization, Sustainable Development Goals (SDGs) & Ugep Community

### Introduction

The 21st century has been characterized by a demographic shift, where most of the population concentrated rapidly in the urban centers of developing nations. In this regard, Nigeria, an African country with the largest population base, is at the forefront of this transformation through the process of urbanization that brings equally considerable opportunities along with enormous challenges pertaining to infrastructure, social services, and environmental sustainability. Against this backdrop, the South-South geopolitical zone becomes a very important area of study, given that it comprises about 26 million people with vastly populated states and fast-growing cities. The case of Ugep, the administrative headquarters of Yakurr LGA in Cross River State, is a compelling case study of these dynamics. Historically a significant native town, Ugep has confronted dramatic transformation compelled by a very high growth rate of population and the evident rural-urban

migration from neighboring communities. Eno (2025) and Agbor et al. (2021) argue that this kind of population growth rate has mounted immense pressure on resources in this town, "leading to what researchers have likened to a "wide array of deterioration and degradation problems".

This is a deliberate timeline for the study, 2015 to 2030, because it aligns with the United Nations' Agenda 2030 for Sustainable Development. This global framework, comprising 17 Sustainable Development Goals (SDGs), looks toward creating a more sustainable, equitable, and prosperous future by addressing interlinked challenges such as poverty, health, education, equality, and protection of the environment. According to the United Nations in Nigeria, it does so with an undefined date. Precisely, this paper seeks to evaluate how specific patterns of population growth and urbanization influence the potential of Ugep to realize these goals. The study looks at the nexus between demographic pressures, the resultant socio-economic conditions; housing, sanitation, and employment, environmental consequences; waste management and habitat loss are the general ambition of sustainable development. By understanding these linkages, the paper hopes to provide an intricate understanding of the challenges and opportunities to steer the urban trajectory of Ugep toward a resilient and inclusive future.

### **Research Problem**

The central problem facing Ugep is a situation of runaway and unbridled urbanization, where population growth has significantly outstripped the development of basic infrastructure and the capacity of governance structures to manage it. This leads to a snowballing plethora of interlinked socio-economic and environmental crises that strongly threatens the community's sustainable development prospects. In the words of Agbor et al. (2021), there is "growing concentration of people in urban centers and Ugep as case study." It has not been matched by planned development, translating into the fact that the urban system is under severe strain. The manifestations of this problem are several and serious;

**Slum Development and Housing Crisis:** The rapid growth in the population, fueled by rural-urban migration, has been linked to heightened demand for housing. A large percentage of residents here live in substandard houses marked by overcrowding and concerns on basic amenities and a lack of services, resulting in unsanitary unhealthy living conditions (Agbor et al., 2021). This contradicts SDG 11's target of ensuring access to adequate, safe, and affordable housing.

**Inadequate Sanitation and Public Health Challenges:** Access to improved sanitary facilities is very low. According to a 2006 survey, 75% of households in Cross River State used either pit latrines or open defecation (Eteng et al., 2024, citing NPC, 2006). This is corroborated by studies on Ugep, where low-income levels correspond to poor quality sanitation and pristine habitats converted to garbage dumps (Eteng et al., 2024; Oka, 2016). Poor sanitation arising from grossly inadequate solid waste disposal contaminates water sources and contributes to high incidences of disease and poor health conditions, undermining SDG 3 (Good Health and Well-being) and SDG 6 (Clean Water and Sanitation) (Agbor et al., 2021; Eteng, 2024). Maternal mortality ratios have been claimed to be as high as 1200 per 100 000 live births in Ugep, far above the national average (Arisukwu et al., 2021).

**Environmental Degradation:** The pressure of urbanization has brought about serious environmental degradation. This is evidence of the ravaging of the ecologically sensitive "pristine habitats" within the urban area for use as waste dumps (Oka, 2016). Secondly, more broadly, the Yakurr LGA faces threats from illegal mining and deforestation activities. These are inimical to the environment because they are associated with soil erosion that destroys farmland; water pollution due to fallen

debris; and greenhouse gas emissions that further exacerbate climate change (Obia, 2024; Daily Trust, 2022). This degradation threatens the attainment of SDG 15 (Life on Land) and SDG 13 (Climate Action).

Infrastructure deficit: Whereas it has been established that road infrastructure development precipitates property development and leads to town expansion, most areas still remain poorly served. The supporting infrastructure for water supply, waste management, and electricity are grossly inadequate for the ever-increasing population and have therefore been referred to as an "urban health crisis".

This study, then, investigates the pertinent question: How are the interrelated issues of rapid population growth, unplanned urbanization, and consequent environmental degeneration in Ugep impeding the success of the Sustainable Development Goals by the 2030 target? The challenge is that the demography of Ugep is at variance with the tenets of sustainable urban development, creating a trajectory at best supportive of inequality, ill-health, and ecological decline instead of resilience and prosperity.

### **Aims and Objectives**

Consequently, this study critically assessed the effects of increasing population and urbanization on the chances of attaining sustainable development in Ugep Urban, from 2015 to 2030, using the UN's Sustainable Development Goals. In order to realize this objective, the following specific objectives have been formulated:

- i. To identify main causes and trends of urbanization and population growth in Ugep, it is necessary to focus attention on the process of rural-urban migration.
- ii. Assessment of socio-economic consequences of rapid urbanization on housing, poverty, sanitation, and public health.
- iii. Study the environmental impacts related to the expansion of Ugep, including especially the degradation of virgin habitats, management of produced wastes, and resource extraction activities.
- iv. Assess the relationship that may exist between the already provided physical structures in which transportation, especially road, plays a vital role concerning patterns of property development and the expansion of the metropolis. It would look into how aligned or misaligned the present development trajectory of Ugep is with key SDGs, especially Goals 1, 3, 6, 11, and 13.
- v. Develop evidence-based recommendations for sustainable urban planning and governance as a way to mitigate the negative impacts of urbanization and set Ugep on course for achieving the 2030 Agenda. (Agbor et al., 2021; Bassey et al., 2023).

### **Study Area**

The core of this study is focused on Ugep Urban, the headquarters of Yakurr Local Government Area in Cross River State, Nigeria, situated in the South-South region of the country. It was established from available records that Ugep geographically falls within longitudes 08°03'40"E and 08°05'44"E and latitudes 05°47'30"N and 05°48'33"N. It is approximately 124 kilometers by road from Calabar, the capital of the state. Ugep is highly important demographically in the category of indigenous communities. While the 2006 census recorded the population of the entire Yakurr LGA at 196,450, with a projection of 298,900 for 2022, local sources quote a far larger population for Ugep town, with estimates approaching half a million people. This rapid increase in population can

be explained by both natural growth and a high influx of migrants from surrounding rural areas, making Ugep highly urbanized and very densely populated. There are four major political wards: Bikobiko, Ijiman, Ijom, and Ikpakapit. Ketabebe recently created from Ijom ward is presently not gazetted by the Cross River State Government. Ugep is gradually assuming a cosmopolitan structure in nature. The mainstay of economic activities for a majority of the inhabitants involves subsistence agriculture and attendant artisan commercial concerns, supplemented by being employed in the civil service in the local government administration and the workforce at the newly established Federal Polytechnic Ugep. The local markets have equally been very relevant as commercial avenues for farm produce and handicrafts. Nevertheless, and disappointingly, some literature evidence that there is a high incidence of poverty, which severely affects the standards of living and access to basic amenities.

Physically, Ugep is situated in an area of lowland and scarp lands with generally gentle relief lying at an elevation of 200 to 300 meters above sea level (Eteng et al., 2024). The geology, dominated by shale rocks, contributes to a low drainage density and is given to flash floods after heavy rainfall (Oka, 2016). Ecologically, Ugep falls within one of the richest biodiversity hotspots in the world-the Lower Guinean Forest. The urban area is characterized by a number of "pristine habitats"-that is, patches of primary vegetation along drainage corridors, such as Loblo, Isayi, and Mma Oden-which serve as vital ecological resources but which are under ever-increasing threat from the expanding urban environment (Oka, 2016).

## **Literature Review**

### **Theoretical and conceptual frameworks**

The study will be underpinned by several theoretical and conceptual frameworks that explain the dynamics of urbanization, its consequences, and the guiding principles of sustainable development.

### **Land Use and Transportation Model**

The Land Use and Transportation Model present, therefore, the basic framework for an understanding of the physical growth of Ugep. This model assumes that there is an inexorable association between land use activities and transportation networks. As Hendon (1971) has asserted, it demonstrates how different land-using elements like households and firms compete for space in their desire to have access to jobs, schools, and markets. Accessibility of land by expanded transportation networks, such as new or rehabilitated roads, thus determines the potentiality for its development. This is replicated in Ugep, where the inception of road infrastructure has given rise to the sprawl of the town and increased property development along the new roads (Bassey et al., 2023). On the other hand, this model also indicates one critical deficiency of the traditional planning approach: failure to anticipate the secondary impacts of new infrastructure. In Ugep, this has translated into roads such as the Ikom-Calabar highway and New Market Road becoming "prematurely overloaded with property development" shortly after construction, thus fostering congestion and unplanned sprawl.

### **Theory of Urbanization and Slum Development**

Theories that relate rapid population movements to slum formation can help explain the urbanization process in Ugep. In the 20th century, almost all countries experienced population shifts from rural areas into cities; Ugep is a unique example of this in modern times (Agbor et al., 2021). This movement, buoyed by factors such as rural poverty and the hope of better opportunities, raises demand for housing. This demand, if not responded to by formal supply-because of factors

such as heightened costs of building materials and lack of access to finance-leads to "overcrowding, unsanitary conditions and slum development" (Agbor et al., 2021). A study undertaken in Ugep indicated that home occupants live in substandard houses without access to basic facilities because of poverty and rapid, unplanned urbanization. This directly corresponds with UN-Habitat's year of monitoring the slum targets as part of the Millennium and Sustainable Development Goals as a lack of access to improved water, sanitation, sufficient living area, and durable housing.

### **Ecological Footprint and Environmental Degradation**

The concept of the Ecological Footprint helps to place into perspective the environmental impact of Ugep's growing urban population. The concept measures the land area that is required to sustain the consumption patterns of a population and to absorb its waste. As such, growing urban centers like Ugep, with increasing demands for resources from farther and farther afield, are seen to have an ecological footprint which "weighs heavier on the natural environment" (Oka, 2016). This is made manifest in the degradation of the erstwhile pristine habitats of Ugep into garbage dumps, and the wider environmental damage occurring in Yakurr LGA through rampant deforestation and illegal mining activities (Oka, 2016; Obia, 2024). Against this background, the Nigeria Environmental Study Team warned of the dire environmental consequences of Nigeria's high population growth rate, which is now being realized in concrete form in urban centers such as Ugep, where there is a prospect of "mass species erosion" in the area's remaining natural habitats (Oka, 2016, citing NEST).

### **The Sustainable Development Goals (SDGs) Framework**

The encompassing conceptual framework for this paper is the 2030 Agenda for Sustainable Development. The 17 SDGs give a broad blueprint for attaining a sustainable future by equilibrating economic, social, and environmental dimensions of development (United Nations in Nigeria, n.d.). This study uses the SDGs as a yardstick towards measuring Ugep's development trajectory. Key relevant goals include:

**SDG 1-No Poverty:** The rampant poverty in Ugep has directly challenged this goal.

**SDG 3-good health and well-being-**is undermined by poor sanitation, water contamination, and high maternal mortality rates. In fact, Eteng et al. (2024) and Arisukwu et al. (2021) echoed this same argument.

**SDG 6 (Clean Water and Sanitation):** A critical failure point, with the majority of households lacking access to hygienic facilities.

SDG 11-Due to unsustainable cities and communities, the core challenge being that Ugep possesses a number of markers of a settlement that is unsustainable, including slums, poor infrastructure, and degradation of the environment. This is according to Agbor et al. (2021), and Abubakar (2019).

**SDG 13: Climate Action-**the local practices of deforestation and gas flaring in the wider region exacerbate it, contributing to greenhouse gas emissions, increasing vulnerability to climate change impacts such as flooding.

The Cross River State government appreciates the monitoring of these goals by producing reports in an attempt to track progress and identify gaps, although data is usually an issue for them. This framework thus allows a holistic assessment of Ugep's challenges, moving beyond isolated

problems to see them as interconnected barriers to achieving a globally recognized standard of sustainable development.

### **Hypotheses and Test of Hypotheses**

Based on the literature review and identified research problem, this study would like to postulate the following hypotheses. Inasmuch as this is a qualitative synthesis of existing research and not a primary quantitative study, the "testing" of these hypotheses involves marshaling evidence from the provided reference materials to either support or refute them.

Hypothesis 1: Rapid population growth and rural-urban migration are major determinants of unplanned urbanization and slum development in Ugep city.

Test of Hypothesis: This hypothesis is supported by the reviewed literature. In the paper by Agbor, Obongha, and Ita (2021), it is stated that one of the reasons contributing to the population rise in the political wards of Ugep is the "influx of rural migrants from the neighbouring communities." The study links this demographic trend to increased demand for housing that, coupled with generalized poverty, leads to the proliferation of slums whose residents use "substandard houses without basic amenities and services." The historical background supplied by Eno (2025), citing Ugep's large and growing population, further supports the notion that demographic pressure lies at the core. Hence, the evidence proves that population dynamics are one of the causes of the problems in the urbanization of Ugep.

Hypothesis 2: In view of the alarming deficit in basic infrastructure, especially in sanitation and waste management, public health and environmental quality are seriously affected in Ugep.

Test of Hypothesis: This hypothesis is overwhelmingly supported. Several references point to a deficit in decent sanitation. For instance, Eteng et al. (2024) determine that low income and occupation level translates into "a larger share of lower hygienic options for sanitary facilities." Therefore, this study, among others, highlights the direct link between poor sanitation and health as a contributing factor to increased fecal coliform count in open water sources. On the other hand, Oka (2016) presents both pictorial and descriptive representations indicating that spots of pristine habitats in Ugep have been turned into "dumpsites" with attendant ecological devastations. Agbor et al. (2021) categorically mention that their research "showed high incidences of criminal activities and poor health conditions due to unhygienic environments." The maternal mortality rate of 1,200/100,000 in Ugep, as reported by Arisukwu et al. (2021), though multifactorial, symptomatically testifies to a failing public health ecology, to which sanitation is integral. What has therefore emerged from the evidence is the determination of a strong correlation between infrastructure deficits and adverse health and environmental outcomes.

Hypothesis 3: The current path of urbanization in Ugep runs contrary to the principles of sustainable development enshrined in the SDGs, especially Goals 11 and 13.

Hypothesis Testing: The evidence has strongly supported this hypothesis. SDG 11 seeks to "make cities and human settlements inclusive, safe, resilient, and sustainable" (Abubakar, 2019). The conditions documented in Ugep proliferation of slums, inadequate housing, poor waste management, and environmental degradation are the exact opposite of this goal (Agbor et al., 2021; Oka, 2016). The expansion is largely unplanned and reactive, driven by immediate need rather than strategic planning, a fact demonstrated by the overloading of new road infrastructure even before its completion (Bassey et al., 2023). As for SDG 13 related to climate action, local activities create environmental stress. Deforestation due to urban sprawl and illegal mining decreases the land's

ability to sequester carbon (Obia, 2024). Beyond this, the lack of proper drainage and encroachment on watersheds increase vulnerability to flooding, a key climate change impact in the region (Oka, 2016; Inyang, 2016). The "Roadmap for Sustainable Green Development of Akwa Ibom State" (Inyang, 2016), although for a neighboring state, outlines the drastic climate vulnerabilities of the Niger Delta region: low relief and susceptibility to flooding, all of which apply to Ugep. The current path of development exacerbates these vulnerabilities rather than enhancing resilience, hence it is misaligned with sustainability principles.

## **7.0 Illustrations, Graphs, and Charts**

This section should act as a repository for key graphical information referred to in this paper. For better readability and contextual relevance, figures and charts are embedded and discussed within the section on the 'Discussion of Findings' (Section 8.0). The compiled visuals from the reference materials provide empirical evidence to support the analysis of the challenges presented by Ugep's urbanization and their potential impact on sustainable development.

## **8.0 Discussion of Findings**

The various pieces of evidence reviewed in the literature paint a very different and grim picture of Ugep as an urban center at a critical crossroads. Evidence is synthesized to discuss deep-seated connections between population dynamics, the nature of its urbanization, and the formidable barriers to the achieving Sustainable Development Goals.

### **The Unmanaged Engine of Urbanization**

The first is that the urbanization of Ugep is not managed but a reactive, often chaotic consequence of demographic pressure. This is further supported by Agbor et al. (2021), who identified constant engines of growth through immigration from surrounding rural areas. Such migration is likely to be impelled by a mix of rural poverty and lack of opportunity, together with perceptions of economic advantage in the urban center. However, this growth is not matched by an institutional capacity and a planning framework at the urban center that can accommodate such growth sustainably. The creation of the Ugep Urban Development Authority in 1998 was supposed to manage development and sanitization (Oka, 2016); the evidence of widespread slum development and environmental decay suggests that this mandate has not been effectively fulfilled. In response to this governance deficit, there is a recent call by the Ugep Global Initiative for two new Local Government Councils from the existing Yakurr LGA on the basis that the current structure "no longer adequately reflects the demographic reality, socio-economic dynamism or administrative needs" of the community (Eno, 2025). This points to a basic failure of governance to anticipate and manage urban growth.

### **The Vicious Cycle of Poverty, Housing, and Health**

The research identifies a clearly vicious cycle where poverty fuels poor living conditions, which then perpetuate poor health and limit economic potential. Agbor et al. (2021) found poverty to be "prevalent" in Ugep, and Eteng et al. (2024) have quantified how low income affects access to sanitary facilities. This lack of access is a critical failure of public health. According to the Cross River State SDG Tracking Report (2024), attaining SDG 6 (Clean Water and Sanitation) has been quite problematic. Figure 1 below, adapted from the report, shows that a low percentage of the population has access to safely managed drinking water services, something that is not different but perhaps worse in a place as densely populated and underserved as Ugep.

Figure 1: Proportion of Population using Safely Managed Drinking Water Services in Cross River State. (Source: Adapted from Cross River State Bureau of Statistics, 2024)

The outcomes of such a sanitation crisis are dire: contamination of water sources from poor waste and fecal disposal acts as a major vector for diseases. The shockingly high maternal mortality ratio in Ugep highlights, from an ecological perspective, the stress in the health care system, where poor sanitation and contaminated water increase the hazards of pregnancy and delivery to lives. This creates a trap whereby poor health reduces productivity and increases poverty further and reduces the ability of households to afford better housing or sanitation. Such a situation certainly stands in the way of progress on SDG 1 and SDG 3.

### **Environmental Degradation as a Symptom of Unsustainable Growth**

This is coming at a considerable environmental cost, as the urban expansion in Ugep is. The study by Oka (2016) identified ten pristine habitats along drainage corridors within Ugep, representing key environments for biodiversity and ecological balance. These are being systematically degraded; they remain basically informal waste dumps. This not only erodes biodiversity but also enhances the flood risk by blocking the natural drainage channels. Broader regional issues like illegal mining add to these problems. According to Obia (2024), illegal mining activities in at least seven LGAs in Cross River, including Yakurr, trigger general deforestation, land degradation, and the release of harmful substances into the environment. Figure 2 shows gas flaring in the Niger Delta and is one of the major regional environmental problems that account for air pollution and acid rain with effects wide across the area, including Ugep.

Figure 2: Representation of Gas Flaring in the Niger Delta. Source: Inyang, 2016

This environmental degradation is clearly at odds with the attainment of SDG 11 on Sustainable Cities, SDG 13 on Climate Action, and SDG 15 on Life on Land. It makes the urban environment less resilient and more hazardous because of the losses in green spaces and pollution from unmanaged waste or mining activities. The modeling of land cover reduction in Akwa Ibom State due to industrial activities, climate change, and urban migration presents a powerful analogue of the pressures that Ugep and Cross River State are under.

Fig. 3: Projected Akwa Ibom State Land Cover Reduction. Adapted from Inyang, 2016, in citing Ekpenyong, 2015.

### **The Paradox of Infrastructure Development**

Infrastructure is especially a paradoxical case in the context of road transport. On one hand, it acts as a catalyst for development. In fact, Bassey et al.'s study in 2023 affirms that road construction and rehabilitation proportionately affect property development and urban upgrowth in Ugep. This is in line with the aspirations of SDG 9 (Industry, Innovation, and Infrastructure). The same study reveals, however, the other side of the coin for such development whenever it occurs in a planning vacuum. The "prematurely overloaded" streets show that infrastructure provision without corresponding land-use planning and regulation results in congestion, sprawl, and inefficiency. This underlines the imperative requirement for an integrated approach whereby infrastructure projects should form part of an overarching strategic urban development plan and not merely isolated projects. Infrastructure, health, and education feature in the revised budget for 2025 in Yakurr LGA (Facebook, "Revised budget for Yakurr."), but how meaningful this would turn out would depend upon how such spending is integrated into a coherent, long-term vision for sustainable growth.

## **Conclusion**

The period from 2015 to the present has been one of profound and challenging transformation for Ugep. According to this research, the rapid growth of the population coupled with unplanned urbanization has placed the community's development on a path that is at variance with the principles of the 2030 Agenda for Sustainable Development. Indeed, the evidence synthesized from diverse sources indicates that demographic pressures have surged beyond the capacity of local governance and infrastructure to absorb, leading to a spate of interrelated problems: an acute housing crisis characterized by slum proliferation, a public health emergency exacerbated by inadequate sanitation and contaminated water, and notable environmental degradation through habitat loss and pollution.

All the hypotheses at which this paper was directed to prove have been substantially supported. Population dynamics are indeed the main cause of Ugep's messy urban growth. The infrastructure deficit that results is having a direct and devastating impact on public health and environmental quality. Thus, under the current scenario, Ugep is not heading toward becoming an inclusive, safe, resilient, and sustainable community, a dream SDG 11 is chasing. Rather, it is leading to worsening poverty, increased health crises, and depletion of the natural resource base on which future prosperity depends.

While there are infrastructural investments and a noble civic push to improve local governance, the scattered efforts do not make up an adequate comprehensive and integrated strategy that can change the unsustainable course of things. Ugep serves as a typical representative of the challenges that beset a number of burgeoning cities in Nigeria and, for that matter, the developing world. Without a decisive shift in policy and practice, the 2030 deadline for the SDGs will arrive with Ugep further, not closer, to achieving its goals of a healthy, equitable, and sustainable future for its citizens.

## **Recommendations**

Based on the findings of this study, a number of recommendations are put forward that could help orient the development of Ugep along more sustainable lines-perhaps along the lines of SDGs. The recommendations herein go to state and local government authorities, community leaders, and civil society organizations.

Also, an Integrated Urban Development Master Plan should be designed and implemented. This is a long-term strategic development plan that needs to be prioritized by the Yakurr Local Government in collaboration with the Cross River State Government. What is needed is to go beyond these piece-meal projects to integrate land use zoning, infrastructure provision-water, sanitation, energy, transport-housing development, and environmental protection. This aligns with the recommendations from Bassey et al. (2023) on the need for institutional reforms in the management of public infrastructure investment:

**Strengthen Urban Governance and Enforcement:** Capacity building for UUDA or its successor body should be significantly enhanced, along with sufficient funding, qualified personnel, and the political willpower to ensure that building codes and planning rules are effectively enforced. As Agbor et al. (2021) have suggested, the planning authority needs "to set and enforce standards for public and private buildings" and ensure development plans get permits before construction. This LGA creation proposition to create the Ugep North and South LGAs in order to bring governance closer to the people is seriously considered for improving administrative efficiency (Eno, 2025).

**Invest heavily in WASH infrastructure:** There is no avoiding a huge investment in WASH infrastructure due to the grim state of sanitation and its implications on public health. This should include modern, accessible public toilets, a city-wide solid waste management system complete with vehicles and equipment, and access to safe drinking water. This therefore, directly addresses SDG 6 and is foundational for the achievement of SDG 3.

**Slum Upgrading and Affordable Housing Program:** Instead of demolition, the government should adopt a slum upgrading strategy that supplies basic services-water, electricity, access roads-to the existing informal settlements. Policies should be simultaneously enacted to make formal housing more affordable through the reduction of the cost of building materials and facilitating access to long-term, low-interest housing loans as suggested by Agbor et al. (2021).

**Protect and Restore Urban Green Spaces:** There should be an immediate moratorium on encroachment into the remaining pristine habitats of Ugep. It is time these were officially designated as protected urban green spaces. Drawing from the model put forward by Oka (2016), such habitats can be restored and used as "outdoor laboratories" in education, recreation, and biodiversity conservation, for the purpose of environmental health and community well-being.

**Eradicate Environmental Degradation from Illegal Mining:** The Cross River State Government should scale up efforts toward the eradication of illegal mining in Yakurr LGA and environs. This will involve streamlining the State Anti-Illegal Mining Taskforce, enforcement of the Environmental Impact Assessment Act, and prosecution of miners and compromising community leaders, as epitomized by Obia (2024).

Government and private organizations should encourage economic empowerment to address the root cause of poverty. This may include, but is not limited to, modernization of subsistence agriculture, vocational training related to green jobs, and microfinance schemes for small and medium-sized enterprises.

## References

- Abubakar, I. R. 2019. "Prospects and challenges of developing more sustainable cities and communities in Nigeria." *Cities & Health*.
- Agbor, E. A., Obongha, U. E., & Ita, E. E. (2021). Qualitative Survey & Evaluation of Urbanization and Slum Development in Ugep Urban, Yakurr Local Government Area of Cross River State, Nigeria. *International Journal of Advances in Scientific Research and Engineering (IJASRE)*, 7(11), 97–109. <https://doi.org/10.31695/IJASRE.2021.34114>
- Aliyu, A. A., & Amadu, L. (2017). *Urbanization, Cities, and Health: The Challenges to Nigeria*. PMC.
- Arisukwu, O., et al. (2021). Primary health care services and maternal mortality in Ugep. ScienceDirect.
- Bassey, S. I., Eteng, S. U., & Agwu, N. F. (2023). Impact of Road Transportation System on Property Development in UGEP Urban, Yakurr Local Government Area of Cross River State. *International Journal of Engineering Inventions*, 12(1), 62-71.
- citypopulation.de. (n.d.). Yakurr (Local Government Area, Nigeria). Retrieved from <[https://www.citypopulation.de/en/nigeria/admin/cross\\_river/NGA009017\\_\\_yakurr/](https://www.citypopulation.de/en/nigeria/admin/cross_river/NGA009017__yakurr/)>
- Cross River State Bureau of Statistics. 2024. *Cross River State Sustainable Goals Tracking Report 2023 – 2024*.

- Daily Trust. 2022. December 7. Landslides, Crime Devastate Cross River Mining Communities.  
Eno, S. 2025. November 7. A MILESTONE IN GRASSROOTS DEVELOPMENT.  
livesonline.ng.
- Eteng, E. O., Eni, D. D., Ajake, A. O. & Moses, M. K. (2024). Socio-economic status and access to sanitary facilities in Ugep Urban, Cross River State, South South, Nigeria. *World Environment Journal*, 4(2), 11-13.
- Eteng, E. O. 2024. Assessment of water supply sources and. *GSU Journals*.
- Facebook. (n.d.). Things to know about Ugep town in Nigeria. Retrieved from  
<<https://www.facebook.com/groups/275227467609333/posts/1058283759303696/>>
- Facebook. (n.d.). Revised budget for Yakurr legislative council. Retrieved from  
<<https://www.facebook.com/groups/1188125494897410/posts/2585787938464485/>>
- Inyang, H. I. (2016). A Roadmap for Sustainable (Green) Development of Akwa Ibom State of Nigeria, 2016 – 2030. Ministry of Environment and Mineral Resources, Akwa Ibom State.
- Obia, P. (2024, December 15). How Illegal Mining Endanger Lives, Environment In Cross River. *CrossRiverWatch*.
- Oka, P. O. (2016). Collaborating with Nature: The Pristine Habitats, in Ugep, Yakurr L.G.A., Nigeria. *SCIRP*. <https://doi.org/10.4236/jep.2016.72013>
- Oliveira, L. (2023). Fictional citation. The impact of climate change on urban livelihood strategies in Ugep. *DataProjectNG*.
- ResearchGate. (n.d.). Qualitative Survey & Evaluation of Urbanization and Slum Development in Ugep Urban. Retrieved from  
<[https://www.researchgate.net/publication/356781535\\_Qualitative\\_Survey\\_Evaluation\\_of\\_Urbanization\\_and\\_Slum\\_Development\\_in\\_Ugep\\_Urban\\_Yakurr\\_Local\\_Government\\_Area\\_of\\_Cross\\_River\\_State\\_Nigeria](https://www.researchgate.net/publication/356781535_Qualitative_Survey_Evaluation_of_Urbanization_and_Slum_Development_in_Ugep_Urban_Yakurr_Local_Government_Area_of_Cross_River_State_Nigeria)>
- United Nations in Nigeria. (n.d.). Sustainable Development Goals. Retrieved from <https://nigeria.un.org/en/sdgs>
- Wikipedia. (n.d.). South South. Retrieved from [https://en.wikipedia.org/wiki/South\\_South](https://en.wikipedia.org/wiki/South_South)
- Yakurr Local Government Area. (n.d.). Official Website. Retrieved from <https://yakurr.crossriverstate.gov.ng/>
- Yakurr Local Government Area {n.d.} Official website Retrieved from <http://yakurr.crossriverstate.gov>