

Geo-Spatial Territorial Conflict Among Residents in Sub-Saharan Africa – A Perspective from Oyo State, Nigeria

Senator Endurance Okosun¹, Simiat Abimbola Ogunsesan², Daniel Adamu³, Kanu Kingsley Uchenna⁴ and Ipinmoroti Samuel Adejoro⁵

¹Department of Urban and Regional Planning, University of Benin, Nigeria

²Department of Urban and Regional Planning, Polytechnic Ibadan, Oyo State, Nigeria

^{3&4}Department of Urban and Regional Planning, Nasarawa State University, Keffi, Nigeria

⁵Department of Landscape Architecture, Universiti Teknologi Malaysia, Malaysia

DOI: 10.36108/cbpm/2026.0144

Abstract

Geospatial territorial dispute is an emerging spatial planning issue in most states and countries in sub-Saharan Africa (SSA) and Nigeria inclusive. This study conducts a thematic review of existing literature to examine the geospatial foundations of territorial conflicts in Oyo State, Nigeria. Synthesis involves data from peer-reviewed articles, GIS-based studies, government documents, and case-study studies. Analysis indicates that the absence of coordinated spatial data systems and poor institutional coordination are contributing factors to the persistent conflicts in Peri-urban areas of Oyo State. Research findings indicate the exploitation of authority by local elites, violations of customary land rights, and the ineffectiveness of dispute resolution systems. The evidence suggests that Geographic Information Systems (GIS) used in participatory boundary demarcation and tenure regularization can reduce conflict by enhancing the transparency and accuracy of planning. Customary authorities, including family heads and traditional rulers, persist in exerting influence over land allocation and utilisation. The disparity among professionals regarding the Nigeria Land Use Act of 1978 should be revisited to align with the advocacy for the adoption of modern technology (GIS tools) in order to reduce conflict. The study recommended policy for spatial reforms, multi-stakeholder engagement, and inclusive land registration programs that will mitigate territorial disputes, spatial justice and geospatial governance for a sustainable urbanization in Oyo State and Nigeria in general and other similar urbanizing contexts.

Keywords: Geo-spatial analysis, Land governance, Oyo State, Territorial conflict

1. Introduction

Territorial and spatial conflicts are a defining characteristic of Nigeria's changing urban environment, particularly in areas experiencing accelerated demographic and infrastructural change, with growing urbanisation in Sub-Saharan Africa Countries. Land is used more and more as a resource and source of conflict, representing identity, power, and economic opportunity. Oyo State in South-western Nigeria serves as a notable example. Oyo's population surpasses 7.8 million, with an annual urban growth rate of about 4.5%. This rapid urban expansion is generating considerable land-related tensions, particularly as it intrudes upon historically rural and peri-urban communities (National Population Commission 2023; World Bank, 2022). In cities such as the capital city of Ibadan, land has ceased to be defined classically as space. The land is defined by vying interests, vague tenures, and ineffective institutions. Nigeria's dual land tenure system is a source of the root cause of regional conflict because it combines statutory land titles as regulated by national law and traditional ones as regulated by tradition, held by family lineages and local chiefs. This duality makes

room for contradictory claims and the very same piece of land "sold" multiple times under different jurisdictions. Olajide, et al (2021) clarify that the system creates a space of grey where legality intersects with legitimacy. In peri-urban areas like Lagelu and Akinyele, these encounters are not only bureaucratic problems but materialize as physical confrontation, eviction, and long-drawn-out legal conflicts. Locals usually maintain that they bought the land legally but are confronted by new "owners" or traditional leaders challenging the legitimacy of their possession. The grave lack of integrated spatial data systems exacerbates the issue. Cadastral records, where they do exist, are stale or maintained inconsistently (Adegun, 2023). Most stay in paper format, circulated among ministries with little or no interlinking. Electronic ventures such as the Oyo State Geographic Information System (OYOGIS) are attempting to map this challenge by mapping geospatial and placing it in electronic format; however, the platform is incomplete and lacks proper resources (Adegun, 2023; Fabiyi, 2020). The absence of real-time data integration makes planning decisions tend to rely on unverifiable or disputed information for noble purposes. Besides that, planners and users must navigate border areas without access to

¹ Corresponding Author

Email address: senator.okosun@uniben.edu

contemporary cartographic techniques, something that undermines trust in land administration.

Grey and Amadasun (2023) posit that without transparent and enforceable spatial governance, the land ends up being a locus of informal bargaining, patronage, and exploitation. The vulnerability is particularly evident in peri-urban areas, where the intersection of urban and rural dynamics results in communities facing legal and administrative uncertainty. This context prompts critical enquiries regarding spatial justice within Nigerian urbanism. Who possesses the entitlement to urban space? Which claims to land are acknowledged, and which are rejected? Addressing these questions necessitates not only policy reforms but also a fundamental re-evaluation of land administration, integrating geospatial technologies, participatory mapping, and transparent land registries. Fabiyi (2022) supports the integration of GIS tools into local governance systems to enhance conflict detection, clarify spatial boundaries and promote inclusive decision-making processes (Adegun, 2023). The situation in Oyo State exemplifies broader national challenges in land governance rather than being an isolated regional issue. This serves as a case study for the entrenchment of spatial conflict within the narrative of urbanisation in Nigeria.

2. Literature review

Analysing geospatial territorial conflict among residents in Oyo State necessitates a solid foundation in pertinent theoretical frameworks. Human territoriality, as articulated by Sack (1986), refers to the efforts of individuals or groups to influence, affect, or control people, phenomena, and relationships through the delineation and assertion of control over a specific geographic area. In rapidly urbanising contexts such as South-western Nigeria, land serves as a fundamental component of identity, social power, and economic leverage. Territorial claims over land represent not only economic interests but also socio-political actions rooted in cultural norms and historical relationships.

Land tenure theory serves as an essential theoretical basis for this study. This analysis elucidates the definitions, holdings, and transfer mechanisms of land rights within a society. Nigeria's land governance exhibits a dual system that includes both statutory and customary tenure regimes. The Land Use Act of 1978 instituted statutory control by assigning ownership of all land to state governors; however, customary authorities, including family heads and traditional rulers, persist in exerting influence over land allocation and utilisation. This duality resulted in overlapping claims, frequently leading to extended disputes (Agunbiade et al 2021). The lack of harmonisation among these systems has resulted in legal ambiguity and intensified territorial disputes.

Spatial conflict theory provides a framework for analysing the unequal distribution of space and the resultant competition and confrontation that arises from this distribution (Agunbiade et al. 2021). In Oyo State, territoriality is frequently manifested by families or community groups aiming to preserve control over ancestral land despite urban encroachment and state interventions. Expressions of territoriality intensify in peri-urban areas, where rural and urban dynamics converge. Boundary disputes represent a notable form of geo-spatial conflict, disputes frequently occur as a result of ambiguous land parcel boundaries, obsolete cadastral records, and conflicting claims from both statutory and customary systems. Residents in Akinyele and Lagelu Local Government Areas frequently report on-going disputes concerning land that was previously used for agriculture but now designated for residential development (Fabiyi, 2020) (Figure 1 and 2).

Zoning serves as a planning instrument that allocates land for designated purposes, including residential, commercial, agricultural, or industrial uses. Zoning in Oyo State is subject to inconsistent enforcement. In many cases, land zoned for one purpose is repurposed informally for another (Olaniyan, 2017). Developers and speculators frequently collaborate with local

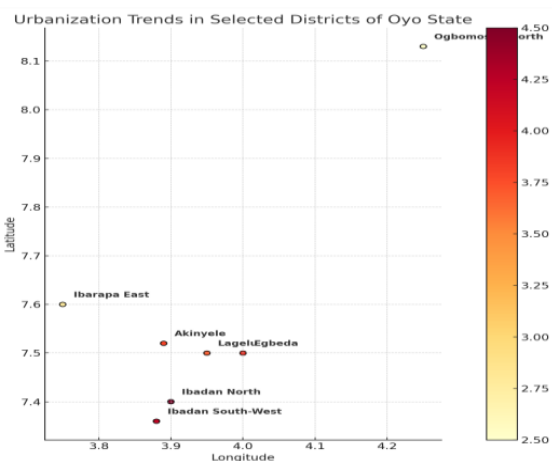


Figure 1: Urbanization trend in Oyo State

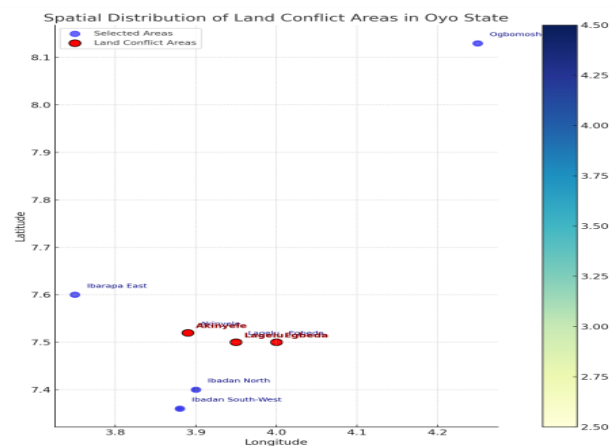


Figure 2: Spatial Distribution of Conflict Area in Oyo State

officials to secure unauthorised permits, thereby evading established zoning regulations, these compromise planning objectives and frequently results in land use conflicts.

Many studies have investigated geo-spatial conflicts in Nigeria, identifying Lagos and Ibadan as major areas due to their accelerated urban development. Afinowi, (2022) noted that in Lagos, Nigeria, conflicts often stem from the growth of informal settlements, discrepancies in land titles, and inadequate enforcement of planning regulations. Fabiyi (2020) illustrated that inadequate spatial data infrastructure in Ibadan obstructs efficient land administration. The lack of integrated GIS systems results in planners frequently depending on out-dated paper maps, which are insufficient for addressing boundary issues in evolving urban settings. The Oyo State Geographic Information System (OYOGIS) was created to tackle this issue; however, its implementation has been inconsistent and inadequately coordinated. In Nairobi, informal settlements have developed on state and communal land (Andoh, 2024), resulting in recurrent conflicts between residents and authorities. De Satgé & Watson (2018) illustrates that spatial conflict in Johannesburg, South Africa is fundamentally linked to the historical context of apartheid-era land policies, further exacerbated by contemporary governance deficiencies and market-oriented development practices. The global cases illustrate the universality of spatial conflict in the contexts of rapid urbanisation and institutional duality.

The literature offers important insights into land and spatial conflict; however, notable gaps remain. Most Nigerian studies primarily address land conflict as a legal or administrative matter, with minimal involvement in geospatial analysis. This research addresses the gap by using GIS tools to delineate the spatial aspects of territorial conflict in Oyo State. This approach enhances the comprehension of geographic patterns and hotspots of disputes, providing data-driven solutions. Secondly, current research predominantly emphasises urban centres, overlooking peri-urban and transitional zones where conflict occurs. Finally, there is insufficient discourse on spatial justice in the context of Nigerian planning, spatial justice as a framework that examines the distribution of benefits and costs associated with land development, equitable planning, conflict resolution, promoting participatory land governance that encompasses all stakeholders, particularly the most vulnerable populations. This research offers a detailed analysis of geospatial territorial conflict and suggests practical solutions for resolving land disputes and improving planning practices in South-western, Nigeria.

2.1. Study Area

Oyo State is situated in South-western Nigeria, ranks among the most urbanised regions of the country and serves as a significant socio-economic centre within the

Yoruba-speaking population. The population was estimated at over 7.8 million in 2023 (National Population Commission 2023), with urban growth rates between 2.5% and 4.5% in its central districts, Ibadan, the capital of the state, ranks as the third most populous city in Nigeria and serves as a cultural, political, and administrative hub characterised by a growing peri-urban landscape. The socio-spatial structure of Oyo State demonstrates a complex relationship between urban growth and established rural communities. The land conversion process frequently lacks regulation, resulting in disputes regarding zoning, resettlement, and resource allocation. The territorial conflict in Oyo State has a historical foundation, particularly in regions where urban and customary land claims converge. In Yoruba societies, land was traditionally held communally and managed by family heads or representatives of lineages. The transition to statutory land administration systems during the colonial and post-independence periods disrupted this pattern. After the enactment of the 1978 Land Use Act, governors were granted authority over land management. In practice, customary authorities maintained *de facto* ownership, particularly in peri-urban areas; this duality has endured and serves as a primary factor in spatial conflicts. In districts such as Lagelu and Akinyele, family-owned lands frequently undergo multiple resales by various claimants, leading to overlapping titles, forced evictions, and, in certain instances, physical violence (Olajide *et al.*, 2021).

Territorial disputes within the state can be categorised into three main types: intra-family conflicts regarding inheritance and ownership, inter-community boundary disputes, and clashes between residents and government concerning resettlement and compensation. Intra-family disputes are common in the older sections of Ibadan and Oyo towns, characterised by a lack of formal land documentation and reliance on orally transmitted traditional claims. Inter-community conflicts frequently emerge from unclear or obsolete administrative boundaries, as demonstrated by on-going disputes along the borders of Lagelu and Egbeda LGAs. Conflicts between residents and state actors have increasingly emerged in recent urban renewal programs, where infrastructure initiatives like road expansion or housing schemes result in forced displacement without sufficient compensation or consultation (Adegun, 2023).

The political-administrative framework of Oyo State consists of 33 Local Government Areas (LGAs) and various traditional domains overseen by Obas (kings) and Baales (chiefs). The LGAs hold statutory responsibilities for local planning and development; however, traditional leaders continue to exert considerable influence over land allocation, particularly in rural and peri-urban areas. The dual authorities frequently function independently, exhibiting minimal coordination and lacking integrated

land registry systems. Thus, conflicts arise not only from physical encroachment but also from failures in systemic governance. Traditional governance structures, notably the role of Mogaji (family heads) and land allocation committees under the Oba's authority continue to exert significant influence on the social legitimacy of land ownership. These structures do not receive formal acknowledgement in state planning policies. The on-going exclusion of traditional actors from formal land management processes perpetuates mistrust. This reinforces informal practices like undocumented land sales, leading to territorial disputes when urban development projects commence (Agunbiade *et al.*, 2021). The geospatial dynamics of territorial conflict in Oyo State are intricately linked to its historical, administrative, and demographic contexts.

3. Methodology

This study employs a methodology grounded on a thematic analysis of a corpus of literature, spatial data, and empirical accounts pertinent to the geospatial territorial contest in Oyo State, Nigeria. This study, not primarily field-based, employs a mixed-methods approach through integrating qualitative and quantitative sources of evidence to develop a contextual, evidence-based analysis. This type of design is most appropriate because the intricate, multi-faceted character of land conflicts can be best comprehended by a synthesis of spatial, social, legal, and institutional viewpoints. The objective is to map conflict patterns as well as analyze drivers that drive these conflicts and the planning tools available for their mitigation. The research uses a variety of data sources. The primary dataset consists of Geographic Information Systems (GIS) data obtained from the Oyo State Geographic Information System (OYOGIS), which includes parcel-level land use types, zoning overlays, and cadastral information. Satellite imagery from Google Earth Pro and Sentinel-2 has been utilized in an effort to map the informal settlements and track land transformation processes over a time frame, specifically between 2015 and 2023. This data enables the visualization and spatial depiction of the abrupt morphological changes in peri-urban regions like Akinyele, Lagelu, and Egbeda, which are predominantly occurring in the absence of the new land governance systems (Fabiya, 2020; Adegun, 2023).

The review harmonizes land registry data and urban planning data from the Oyo State Ministry of Lands, Housing and Urban Development and spatial datasets. The data comprised reports of land allocation, revocations, compensation notices, and court judgments in land disputes, furnishing key institutional context. Qualitative data were synthesized from interviews in prior field-based studies involving residents, local chiefs, planning officers, and legal professionals. In a study in 2021 on land conflict in

peri-urban Ibadan, over 300 households were interviewed to identify tenure insecurity, conflict frequency, and familiarity with zoning rules. Findings showed that 47% of participants had encountered or known individuals affected by land conflict within the last five years, but only 19% possessed legally recognized titles (Olajide *et al.*, 2021). The figures provide evidence of the prevalence of informal land practices and their likelihood of being volatile.

Spatial analysis computer programs were key in the research approach. ArcGIS Pro and QGIS version 3.28 were employed to digitize boundary characteristics and overlapping land use classes and conduct proximity analysis around hotspots of conflict. Hotspots were identified at convergence points of informal development, unzoned expansion, and customary statutory land overlap. Thematic mapping facilitated the visualisation of territorial disputes concerning administrative boundaries, settlement expansion, and infrastructural developments. Buffer analyses conducted around major roads, such as the Ibadan-Ife Motorway, indicated that numerous contested parcels are situated within 500 metres of designated urban expansion zones, thereby corroborating the speculative pressure on land adjacent to infrastructure corridors (Grey & Amadasun, 2023).

Descriptive statistics were used to aggregate available datasets, namely identifying the frequency of land conflict by Local Government Area (LGA), the ratio of customary to statutory land tenure claims, and population increase rates where there are conflicts. Inferential statistical techniques were applied to determine correlations between informal settlement presence and territorial conflict likelihood while adjusting for population density and heterogeneity issues in land register data. The experimental testing of methods for spatial autocorrelation was limited by the access to high-resolution, geo-referenced conflict information, and this precluded applying advanced analytics. This critique highlighted ethical concerns in terms of proper data use and proper referencing of sources. Secondary data were all accessed from public materials or peer-reviewed publications duly referenced as per academic standards. Several limitations influenced the methodology; the study is limited by its reliance on secondary data, which may not adequately reflect recent developments or the complexities of community dynamics. Secondly, although satellite imagery serves as an effective instrument for land use analysis, its resolution and temporal frequency may fail to capture micro-level disputes or recent informal constructions. The lack of a unified and publicly accessible geospatial land registry for Oyo State limits the extent of cadastral analysis. The lack of a single household level survey for the aim of this research results in a gap in direct community results. The methodological configuration employed here, although faulty offers a viable ground

for comprehending spatial conflicts within Oyo State. The study provides an in-depth account of how territorial conflicts are comprehended using a combination of various forms of data, including spatial, institutional, and narrative elements. This method demonstrates how GIS and thematic analysis can reveal dynamics in land administration that were initially hidden, thereby increasing the efficacy of spatial planning in conflict mitigation.

4. Findings and Discussion

Geospatial analysis shows a discernible concentration of land conflict in some peri-urban areas of Oyo State, viz. Akinyele, Lagelu, and Egbeda. They are buffer zones between the urbanizing core of Ibadan and the rural hinterland. Conflict intensity scores are on a scale of 1-10 and stand at 8 for Akinyele, 7 for Lagelu, and 6 for Egbeda. These scores reflect varying degrees of land pressure corresponding to pressures of urban growth. Encroachment of land by residential use has been intense in the past 10 years for Akinyele because of its location near the Ibadan-Ilorin motorway and other higher institutions of education, and this has triggered speculative sales of land and urban slum development. Boundary overlap occurs in Akinyele and Lagelu, while conflict mainly occurs in Egbeda due to the conversion of arable land.

Field surveys and institutional accounts indicate that the conflict hotspots tend to be regions with high rates of land use change with inadequate regulatory mechanisms. In these districts, contested land parcels generally lie within 300 to 500 meters of newly developed residential areas or infrastructure corridors, indicating direct spatial influences. The existence of unverified ownership claims and the absence of clearly defined administrative boundaries complicate spatial governance. Between 2018 and 2022, the number of legal disputes relating to competing titles for mixed land use increased by over 25% in Lagelu (Olajide, *et al* 2021). Community members explain that recurring themes of distrust, marginalization, and bureaucratic system failures characterize the conflict patterns. Rapid changes in land ownership, sometimes without formal notification, have been echoed by several citizens in Akinyele. Some have reported being involved in multi-party disputes, where both customary family heads and state authorities give the same plots of land to various developers. Thematic analysis of secondary interview transcripts indicates that residents interpret such experiences as manifestations of injustice and exclusion. Prohibiting land rights, particularly to those who have prior informal tenure, lead to community instability and undermine trust in both government and traditional institutions.

A 2021 household survey revealed that 61% of the participants in Egbeda and Akinyele had suffered or knew of someone who had suffered a forced eviction

within the past five years (Agunbiade *et al.*, 2021). Most of these conflicts have their roots in institutional weaknesses. Land administration in the state is quite fragmented, with both statutory and customary authorities making their claims on governance. This duality creates enormous tension, as family chiefs informally sell plots of land while government officials, following statutory procedure, grant certificates of occupancy of the same plots to other claimants. The absence of integration between the systems produces administrative opaqueness. Planners must rely on outdated cadastral maps, and there is no centralized digital interface combining OYOGIS (Oyo State Geographic Information System) with local land transactions or zoning alterations. Consequently, urban development occurs more or less uncontrolled. In areas such as Akinyele and Lagelu, new structures tend to spring up prior to obtaining the requisite planning permissions, prompting state authorities to make belated attempts at controlling or demolishing such buildings, thereby fuelling conflicts.

Urban growth serves as a stimulant for land use conflicts; as of 2023, the population of Oyo State has surpassed 7.8 million urban dwellers at an average growth rate of 4.5% annually (NPC, 2023). The growth in the population has generated a humongous demand for housing land, especially on the peri-urban outskirts of Ibadan. Infrastructural development, including road networks and industrial estates, has pressured agricultural land use, resulting in opposition to resettlement agreements by households and farmers displaced from their lands. In the Egbeda area, several cases of state expropriation of land for government-driven projects have been recorded in judicial circles, particularly where compensatory payments have been delayed or, where made, have been considered inadequate. Land speculation compounds these issues (Fabiya, 2020).

The role of customary land management traditions is important, particularly in situations where formal planning institutions do not support land. In many communities, traditional authorities such as Obas and Mogajis oversee initial allocations and sales. These actors frequently possess respect and social legitimacy; however, they lack the legal framework necessary to enforce claims when formal state institutions become involved. Conflicts often emerge when state-sanctioned developers intrude upon customary land without involving traditional stakeholders. In Akinyele, the exclusion of bale councils from land acquisition negotiations caused confrontations in 2021, where youth organizations protested against bulldozers utilized in clearing a private estate (Grey & Amadasun, 2023). In contrast, land administration through institutions is inefficient and politically seen as biased. Obtaining a Certificate of Occupancy involves high costs and lengthy lead times, and therefore, most residents shy away from it. Land registries are also

fragmented, which means poor coordination between the Ministry of Lands and local government planning offices. This is a source of double allocations, unequal enforcement of zoning, and bureaucratic clogging that discourages legitimate developers and residents. In Lagelu LGA, a similar case of four various title documents to a parcel of land, all from different offices or traditional families, has been reported (Adegun, 2023).

The intensity of conflict and spatial patterns are positively correlated. Spaces of high informal settlement expansion and low cadastral accuracy have the most frequent and intense disputes. Akinyele possesses the highest conflict intensity rating of 8/10 and the most unregistered residential pattern expansion. Lagelu is closely monitored, with conflicts likely to occur in the mixed-use development spaces lacking proper reclassification predominantly. The intensity of conflict in Egbeda, though lower to a limited extent, points to peri-urban areas of transition where agro-related vulnerabilities are high. Buffer and hotspot analysis, with the help of GIS tools, establish that disputed places are mainly located around infrastructure nodes and, therefore, reinforce the notion that access and speculative value are core in fuelling conflict. These findings are consistent with the literature; in Lagos, the same patterns were also observed, wherein urban growth greatly exceeded regulatory capability and generated widespread land conflict (Oduwaye, 2018). Syagga (2021) linked the themes of spatial injustice and land tenure history with the modern dilemma of policy inconsistency in Nairobi, Kenya. The socio-political history of Nigeria offers an understanding of the problems experienced by Oyo State, which represent a wider story across urban Africa marked by tension between formal urban planning principles and the existence of informal settlements.

Implications for Urban Planning and Policy

The on-going geospatial territorial conflict in Oyo State highlights critical implications for urban planning and policy. The expansion of the state's urban footprint into peri-urban and rural areas presents challenges related to land disputes, contested ownership, boundary overlaps, and unregulated settlements, which jeopardise sustainable urban development. One of the implications is the need for open, enforceable land use zoning regulations. The zoning process in the state of Oyo lacks coherence and is primarily out-dated and, therefore, opens to encroachment and clandestine alteration. In the areas of Akinyele and Lagelu, new residential developments have appeared in zones reserved initially for agriculture or mixed land use without going through the official process of reclassification. The ambiguity in zoning undermines planning authority and exacerbates territorial conflict through competing claims regarding land use legitimacy (Olajide, Agunbiade, & Bishi, 2021). A robust policy framework is necessary to connect urban

expansion with tenure regularisation and amount of land in peri-urban regions remains regulated by customary tenure systems, which do not receive formal acknowledgement under statutory law. Instituting these systems of tenure in the current framework can help curtail contentious claims and safeguard vulnerable communities against displacement. In addition, policies should promote affordable and effective means of acquisition of Certificates of Occupancy and official titles, especially for established residents who are holding the land under customary allocation. This action would enhance legal clarity and facilitate access to credit and services associated with land ownership, thereby promoting social equity.

The establishment of conflict-sensitive dispute resolution frameworks integrated into the urban planning process is equally important. Currently, disputes frequently remain unresolved in the courts, with cases extending for years. One viable solution is the establishment of local land mediation committees that unite traditional leaders, planning authorities, and legal practitioners. These entities can resolve conflicts at an initial phase, potentially preventing escalation into violence or protracted legal proceedings. Community-based adjudication systems, when bolstered by formal institutions, have demonstrated success in some areas of East Africa and may serve as a viable model for Oyo State (Rivera-Williams 2025).

This study highlights the fundamental use of Geographic Information Systems (GIS) in monitoring territorial changes. Geographic Information Systems enable the real-time visualization of land use, boundary definition, and territorial changes, and hence, important to improve decision-making in urban planning. Despite the low usage of digital tools such as OYOGIS, they have the potential to integrate parcel-level information, zoning maps, and transaction data into one digital database. Layering spatial data with social indicators, such as conflict intensity or tenure type, enables planners to identify at-risk areas proactively and intervene prior to the escalation of disputes. Additionally, GIS tools facilitate the visualisation of land allocation patterns, enabling stakeholders to identify inconsistencies or illegal allocations at an early stage (Fabiya, 2020).

The effective functioning of these systems requires good coordination between different sectors. Consultation with stakeholders has to go beyond shallow consultation to create true partnerships with the local players. Involving Obas, Baales, and Mogajis in urban management strengthens government legitimacy and ensures formal policies align with the local conditions. Land agencies should increase transparency and invigorate administrative procedures to eliminate bureaucratic failures that create dual allocations and speculation. Urban planners are essential in addressing these disparities. Town planning committees, ward-

based zoning forums, and digital platforms for citizen reporting of land issues serve as effective mechanisms to enhance trust and governance. Involving residents in zoning decisions, resettlement plans, and land assessments enables urban planners to align development projects with community requirements as well as address the underlying drivers of spatial disparity. The findings from the case of Oyo State indicate that territorial conflict stems from the lack of proper spatial governance coupled with socio-political complexities. Addressing these issues calls for an integrated policy approach to enhance zoning laws, regularize tenure systems, establish local conflict settlement mechanisms, and make use of GIS-based monitoring for anticipation. It also calls for a culture of planning focused on collaboration, transparency, and justice.

5. Conclusion and Further Research

Spatial analysis has proven the existence of a significant relationship between conflict occurrence and areas with poor cadastral recording, overlapping boundaries, and inconsistencies in the zoning policies of a country. The study illustrates that insufficient institutional coordination and the lack of integration of traditional land authorities into formal planning frameworks exacerbate these disputes. This study enhances understanding by demonstrating the application of tools such as GIS and thematic mapping

in monitoring territorial pressure points and facilitating proactive urban policy. This analysis enhances the application of spatial conflict theory and land tenure theory within African urban contexts, highlighting the complex and localized characteristics of territorial disputes. The study emphasizes the importance of formalizing tenure systems, zoning controls, and the inclusion of stakeholders in the planning process. Official recognition of customary authorities in the governance institutions and the enhancement of GIS-based spatial monitoring to anticipate and mitigate conflict is necessary. The holistic approach provides a model for addressing similar problems in areas of Nigeria facing rapid urban growth. Future research should focus on comparative geospatial examinations of other South-western Nigerian states, including Ogun, Osun, Ekiti, and Ondo States. The objective would be to establish regional trends and inconsistencies in land governance and conflict dynamics. Future research can also incorporate participatory GIS methods to map local understandings of boundary legitimacy and spatial disparity, thus enhancing both scholarly understanding and planning practice.

References

- Adedeji, A. A. (2016). *Spatial exploration and analysis of electricity poverty: A case study of Ibadan, Southwestern, Nigeria* (Doctoral dissertation, University of Leicester).
- Adegun, O. B. (2023). Flood-related challenges and impacts within coastal informal settlements: A case from Lagos, Nigeria. *International Journal of Urban Sustainable Development*, 15(1), 1–13.
- Afinowi, T. A. (2022). *The intersections between global urban agendas and practice at local levels in housing and human settlements, a case of Lagos* (Doctoral dissertation).
- Agunbiade, M. E., Olajide, O., & Bishi, H. (2021). Urban governance and smart future cities in Nigeria: Lagos flagship projects as springboard?. In *Refractions of the national, the popular and the global in African cities* (pp. 127–145).
- Andoh, N. Y. (2024). *Informal settlements: The intersection of social networks, livelihoods, and the built environment in Johannesburg, Nairobi, and Accra* (Doctoral dissertation).
- Bello, F. G., Carr, N., & Lovelock, B. (2016). Community participation framework for protected area-based tourism planning. *Tourism Planning & Development*, 13(4), 469–485. <https://doi.org/10.1080/21568316.2015.1136838>
- De Satgé, R., & Watson, V. (2018). *Urban planning in the global South: Conflicting rationalities in contested urban space*. https://doi.org/10.1007/978-3_31969496-2
- Fabiyi, O. O. (2020). Digital urban administration model for a traditional city. In *Sustainability in Urban Planning and Design* (p. 265).
- Gayawan, E., Arogundade, E. D., & Adebayo, S. B. (2014). Possible determinants and spatial patterns of Anaemia among young children in Nigeria: A Bayesian semi-parametric modelling. *International Health*, 6(1), 35–45. <https://doi.org/10.1093/inthealth/ih5069>
- Gray, M., & Amadasun, S. (2023). *Social work, social welfare, and social development in Nigeria: A postcolonial perspective*. Routledge.

- Habitat, U. N. (2022). *Envisaging the future of cities. World Cities Report 2022*, 42.
- Jemiluyi, O. O., & Jeke, L. (2024). The role of human capital development in urbanizationeconomic growth nexus: A new insight on Nigeria. *Sustainable Futures*, 8, 100266. <https://doi.org/10.1016/j.sftr.2023.100266>
- Ogundiwin, B. A. (n.d.). *Cartographic history, the post-colonial landscape and the agricultural settlement scheme: A case study of citizen-based mapping in northeastern Ibadan rural hinterland* (Doctoral dissertation, University of the Witwatersrand, Johannesburg).
- Olaniyan, O. (2017). *Sustainable development of Ibadan: Past, present and future*. Centre for Sustainable Development, University of Ibadan.
- Pillah, T. P. (2023). Population and housing census in Nigeria. *Journal of Public Administration, Policy and Governance Research*, 1(3), 9–21.
- Rivera-Williams, J. (2025). *A multiple perspective analysis on urban poverty in developing nations: A case study on Nigeria, colonial implications, and modern-day outcomes*.
- Sack, R. D. (1986). *Human territoriality: Its theory and history* (Vol. 7). Cambridge University Press.
- UN-Habitat. (2022). *World cities report 2022: Envisaging the future of cities*. Nairobi: UN Habitat.
- World Bank Group. (2022). *Global economic prospects, January 2022*. World Bank Publications. <https://doi.org/10.1596/978-1-4648-1758-8>